

Section C

Steel Stud Walls

10/2025

STEEL STUD WALLS

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INTRODUCTION

Description

Knauf Steel Stud Wall systems consist of single or multiple layers of plasterboard, screw fixed to one or both sides of light gauge Rondo C-stud or QUIET STUD® framing.

Design Options

Steel stud wall systems outlined in this manual provide Designers and Builders with a wide range of options to suit project specific requirements in regard to fire rating, acoustic isolation, water resistance and impact resistance. A large number of hybrid systems have been included, providing cost effective solutions when impact and/or water resistance requirements differ on each side of the wall.

The following types of Steel Stud Wall Systems are outlined in this manual:

- Lined One Side
- Lined Both Sides
- QUIET STUD
- Staggered Stud
- Twin Stud.

Materials

Plasterboard Linings

- 10 mm / 13 mm SHEETROCK ONE
- 10 mm SHEETROCK PLUS
- 13 mm WetStop
- 13 mm / 16 mm FireStop
- 13 mm ImpactStop
- 13 mm / 16 mm MultiStop ONE
- 13 mm MultiStop ONE HI
- 13 mm / 16 mm FIBEROCK Aqua-Tough

Other Linings

- 12.5 mm PERMAROCK
- 6 mm VILLABOARD

Insulation

Knauf Insulation Glasswool

- KI 50G11 - 50 mm glasswool insulation 11 kg/m³ density
- KI 75G11 - 75 mm glasswool insulation 11 kg/m³ density
- KI 90G11 - 90 mm glasswool insulation 11 kg/m³ density

Steel Framing

Knauf steel stud wall systems utilise Rondo framing as outlined below:

Lipped C-studs

Lipped C-studs are available in a number of sizes and Base Metal Thicknesses (BMT):

TABLE C1: RONDO LIPPED C-STUDS				
STUD SIZE mm	BASE METAL THICKNESS (BMT) mm			
	0.50	0.55	0.75	1.15
51	●		●	
64	●		●	●
76		●	●	●
92		●	●	●
150			●	●

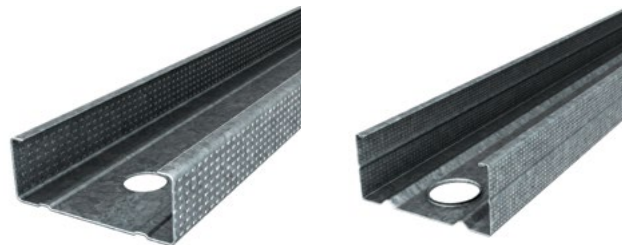


Figure C1: Rondo Lipped C-studs

Quiet Stud®

Rondo QUIET STUD is available in 92 mm size and 0.55 mm or 0.75 mm BMT (lead times apply).



Figure C2: Rondo QUIET STUD®

INTRODUCTION

Wall Tracks

Rondo Wall Tracks are available in the following sizes and Base Metal Thicknesses:

TABLE C2: RONDO WALL TRACKS			
STUD SIZE mm	BASE METAL THICKNESS (BMT) mm		
	0.50	0.70	1.15
51	●	●	
64	●	●	●
76	●	●	●
92	●	●	●



Figure C3: Wall Track

Deflection Head Tracks

Deflection head tracks are available in the following sizes and Base Metal Thicknesses:

TABLE C3: RONDO DEFLECTION HEAD TRACKS				
STUD SIZE mm	BASE METAL THICKNESS (BMT) mm			
	0.50	0.70	0.75	1.15
51		●		
64	●	●		●
76	●	●		●
92	●	●		●
150			●	●



Figure C4: Deflection Head Tracks

Screws

For screw types suitable for various lining configurations and steel stud BMT's refer to General Information — Materials.

Design Considerations

Maximum Heights

Wall heights for non load bearing (NLB) walls must be within the maximum heights as set out in the maximum wall height tables for various systems.

Maximum heights for non load bearing (NLB) steel framed walls have been provided for 0.25 kPa lateral serviceability pressures and are based on L/240 deflection criteria set out in the NCC. Refer also to Notes to Maximum Height Tables below

Notes to Maximum Height Tables

General

- Limiting Factor Symbols:
 - s = permissible strength limits
 - d = deflection limits
 - h = head track capacity limits
 - f = fire height limits
 - sl = slenderness ratio limits.
- Where 2d appears, deflection limits the design and 2 rows of equally spaced noggings are required. Similarly 2s means strength controls the design and 2 rows of equally spaced noggings are required.
- Fire height limit (f) does not apply if fire resistant linings are used in non-fire rated walls. Refer Knauf for maximum wall heights in such situations.
- Minimum yield stress of steel sections to be 270 MPa.
- Deflection limit is height/240 to a maximum of 30 mm (for walls generally as per NCC Specification 6).
- Maximum slenderness ratio $l/r = 300$.
- Wall heights tabled are for single piece Rondo lipped C-studs at maximum centres shown. Stud splicing is not permitted in fire-rated applications.
- Wall heights tabled are for non-load bearing walls and account for self weight and lateral pressures stated.
- Shelf loading is not permitted for the tabulated maximum wall heights. Refer to Rondo for maximum heights with shelf loadings.
- Tabulated heights are for internal walls only. Refer to Rondo if walls are subject to external pressures.
- For fire service, 50 Pa pressure assumed. Where pressures are greater than 50 Pa and fire loadings are likely to be coincident, Knauf should be consulted.
- All plasterboard is to be manufactured by Knauf.
- Walls are to be constructed to Knauf standard C-Stud fire rated or screw-fixed non-fire rated wall details as appropriate but with 300 mm maximum screw centres.

INTRODUCTION

Head Track Capacities

Systems Lined Both Sides

- Wall heights tabled are calculated using standard head track reaction capacities as follows:

TABLE C4: STANDARD HEAD TRACK REACTION CAPACITY kN

TRACK BMT mm	PLASTERBOARD					
	1x10	1x13	1x16	2x10	2x13	2x16
0.55	0.40	0.60	0.90	0.40	0.60	0.90
0.75	0.40	0.60	0.90	0.40	0.60	0.90
1.15	0.40	0.60	0.90	0.40	0.60	0.90

Notes:

- 10 mm max clearance at top of stud, board
- Wall head to Rondo detail TDS/03-103 dated 20th May 1998.

- The tabulated heights have not been checked for a deflection head track requirements as outlined below.
- Where greater vertical deflection capacity is required, Rondo deflection heads may be used with allowable head track reaction capacities as follows:

TABLE C5: DEFLECTION HEAD TRACK REACTION CAPACITY kN

TRACK BMT mm	PLASTERBOARD					
	1x10	1x13	1x16	2x10	2x13	2x16
0.75	0.40	0.44	0.44	0.40	0.44	0.44
1.15	0.40	0.60	0.90	0.40	1.03	1.03

Notes:

- 20 mm max clearance at top of stud, board
- Wall head to Rondo detail TDS/03-107 dated 20th May 1998.

- Alternative head track installations must be checked in accordance with Rondo head track capacity tables.
- The allowable head track reactions noted above, rely on the plasterboard for restraint and must be installed strictly in accordance with Rondo details.
- Alternatively – select connections from Rondo tables TDS/03-101 for standard track and TDS/03-105 for deflection head.
- Plasterboard to be fixed to both sides of the wall frame to the full nominal height of the wall exclusive of any allowance for soffit deflection.
- Additional rows of noggings may be included in the wall frame to maintain stability during construction.
- Framing components and connections must be suitably designed by Rondo or the project Structural Engineer in accordance with AS/NZS 1170.4 Earthquake Actions and other relevant Standards for use in seismic applications.

Systems Lined One Side

TABLE C6: WALL HEAD/BASE DESIGN

WALL CONSTRUCTION	CLEARANCE	REACTION CAPACITY
Twin stud, Head track	10 mm max clearance at top of stud, board	Reaction capacity, refer to Rondo TDS/03-102
	20 mm max clearance at top of stud, board	Reaction capacity, refer to Rondo TDS/03-106
Twin stud, Base track	(Studs hard down into track)	Reaction capacity, refer to Rondo TDS/03-108
Staggered Stud	30 mm max clearance at top of stud, board	Reaction capacity at head and base: 0.47 kN

Notes for staggered stud only:

- Top Hat track to Knauf detail 209710-A
- min 13 mm plasterboard.

For other reaction capacities refer Rondo or Knauf.

Nogged wall frames with board to one side only (ie twin stud walls) require one row of noggings/nogging track 100 mm max below soffit and other noggings as below:

TABLE C7: NOGGINGS FOR SYSTEMS LINED ONE SIDE

WALL HEIGHT	ROWS OF NOGGINGS
Up to 3000 mm	One row noggings/nogging track at mid height
3000 mm to 6000 mm	Two rows noggings/nogging track at third points of height
6000 mm to 8000 mm	Three rows noggings/nogging track at quarter points of height
Greater than 8000 mm	Four rows of noggings/nogging track at fifth points of height

INTRODUCTION

Load Bearing Walls

A load bearing (LB) wall is a wall that is intended to resist vertical forces additional to those due to its own weight.

Maximum loads for load bearing non-fire rated steel stud walls can be determined by the normal structural design. Maximum wall heights for load bearing fire rated steel stud walls can be similarly determined by structural design, however an appropriate lining must be used to provide fire protection to the wall frame as outlined below and where relevant apply an Axial Capacity Reduction (ACR) to achieve the required Fire Resistance Level.

The following wall types with board to each side of single stud or twin stud wall may be used as load-bearing fire rated walls achieving the FRLs stated under the conditions listed below:

TABLE C8: FRLs FOR LOAD BEARING (LB) WALLS

FIRESTOP OR MULTISTOP ONE/ONE HI WALL LINING		FIRE RESISTANCE LEVEL	FIRE ATTACK DIRECTION
SIDE 1	SIDE 2		
1x13 mm	1x13 mm	30/30/30	Both sides
1x16 mm	1x16 mm	60/60/60*	Both sides
2x13 mm	2x13 mm	90/90/90	Both sides
2x16 mm	2x16 mm	120/120/120*	Both sides

* Fire rated load bearing steel design to apply ACR of 20%. Refer to Rondo for design and details.

Conditions:

- All joints to be backed by nogging or studs. Elsewhere nogging to be provided at 1200 mm maximum centres.
- Bracing to be provided within the wall as required by structural design ignoring plasterboard contribution.
- Frame to be designed by an appropriately qualified Structural Engineer and shall comply with AS/NZS 4600: *Cold-formed steel structures*.
- Any structure providing support, including lateral support, to the load bearing fire rated wall must have an FRL of at least that of the wall.
- Stud splicing not allowed.

Shelf Loads

Walls that carry shelf loadings must be designed accordingly. Refer to Rondo Design Manual for permissible shelf loadings for non-fire rated steel stud walls. Refer to Knauf for design of fire rated steel stud walls with shelf loadings.

Penetrations

Penetrations in a fire rated system must be treated strictly in accordance with relevant test reports and approved installation details in order to maintain the system's Fire Resistance Level.

Where components by others are specified in Knauf fire-rated penetration details (ie. dampers, GPOs, fire collars, etc), such components must be installed in accordance with the manufacturer's specifications. It is the responsibility of the component manufacturer to ensure that the fire rating performance of the system is not affected.

INTRODUCTION

Installation

Knauf steel stud wall systems must be assembled strictly in accordance with the details and specifications outlined in this manual in order to achieve stated Fire Resistance Levels and acoustic ratings.

NOTE:

Where proprietary products have been tested in Knauf systems by other manufacturers, reference should be made to the product manufacturer's specifications for details of tested designs and related Standards.

Installation and fastening sequence

Unlike rigid timber framing, light gauge steel studs are prone to flexing and twisting when driving fasteners to secure plasterboard sheets.

The first plasterboard sheet installed at a joint should be fixed to the open side of a stud flange. Additional sheets are then installed in the direction toward the closed side of the stud web.

When installing the first side, screw-fasten the plasterboard sheets to studs at edges only, as illustrated in Figure C5 (positions 1 and 2). Then, on the second side, fasten the edge (position 3) followed by intermediate studs (position 4). Return to the first side and fasten sheets to previously unattached studs (position 5).

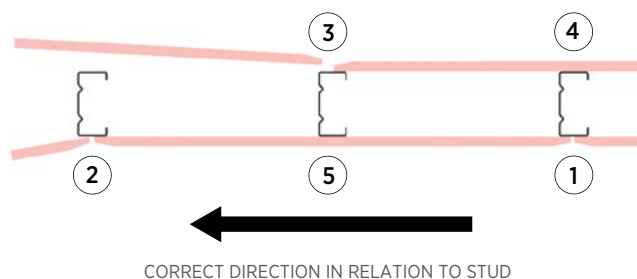


Figure C5: Correct Fastening Sequence

The correct direction of sheet installation is in the direction from the open side of the stud to the closed side of the stud web (Figure C5). The first sheet installed at a joint is screwed to the flange at the open side of the stud. The flange will initially deflect then straighten as the screw pulls tight. Ensure that the stud is adequately supported to avoid twisting, and fully screw this sheet to the stud before continuing.

The next sheet is now screwed to the flange at the closed side of the stud. The deflection on this part of the flange is very small, and the previously installed sheet helps keep the assembly rigid during the installation of the second sheet.

If fixed correctly the result is a flat joint with no lipping. The correct installation sequence is illustrated in Figure C6 below:

Do fix plasterboard sheets in the direction from the open side of the stud to the closed side of the stud:

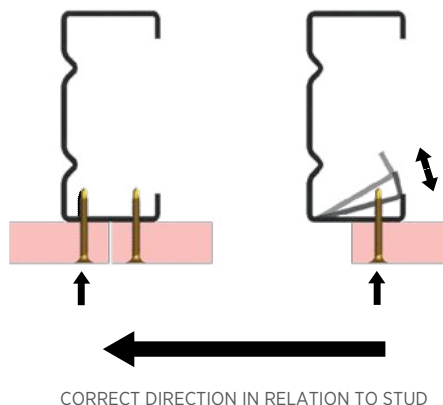


Figure C6: Correct Fastening Sequence Detail

Laying out

- Accurately mark wall layouts.
- Always check individual measurements against overall site dimensions.
- Align the top and bottom tracks accurately according to the plan layout. Attach at ceiling and floor to structural elements.
- Use suitable fasteners for anchoring top and bottom tracks. Locate fasteners at 50 mm from each end and spaced at maximum 600 mm centres along each track.

Framing installation

- For studs in fire rated walls up to 3000 mm high, cut studs nom 15 mm short of the floor-to-ceiling height to allow 15 mm expansion gap at top.
- For studs in walls higher than 3000 mm, allow 5 mm gap per 1000 mm of height for expansion. Allowance should be made for possible deflection of floor/roof structure over walls.
- Studs may be boxed together to provide greater frame strength. Studs are usually boxed to frame door and other openings and to support heavy fixtures on the partition.
- Studs in fire rated partitions are not to be fastened to top and bottom tracks (UNO) except boxed studs at fire door openings which should be pop riveted to the tracks. When framing openings, secure both flanges of boxed studs to the tracks, using pop rivets (refer to Knauf online CAD Finder for details).

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- In addition to noggings specified in the maximum heights notes, noggings are required as headers above doorways, for reinforcement behind fixture attachments, and where special circumstances require additional stiffening of the frame. (Noggings are formed from lengths of steel track, approximately 100 mm longer than the stud spacing. Cut the track flanges at approximately 45 degrees and bend the track ends at right angles to fit between the studs. Position and fasten with stud crimper, or with pop rivets for fire door application).

Plasterboard application

- Plasterboard linings can be installed vertically or horizontally in fire rated and non–fire rated wall systems. Refer Knauf online CAD Finder for plasterboard installation and details for steel stud wall systems.
- If no deflection requirement exists, cut plasterboard sheets to provide 10 mm maximum gap at floor and ceiling.
- Centre abutting vertical sheet edges on stud flanges.
- Fasten plasterboard sheets to steel framing with appropriate screws as outlined in General Information section. Place screws 10 mm–16 mm from sheet ends and edges UNO. Do not fasten plasterboard to top and bottom tracks (UNO) in fire rated systems UNO. Sheets should be installed by advancing in the direction of the stud web (refer Figures C5 and C6).
- Offset plasterboard joints on opposite sides in adjacent layers refer to Knauf online CAD Finder for details.
- For maximum screw spacings refer to Knauf online CAD Finder for details.

Installation details

To view the full range of system CAD details, scan QR code below.



INTRODUCTION

Jointing and Finishing

- Finish all joints and internal and external corners in face layers with the appropriate Knauf jointing system (refer to Knauf Plasterboard Installation Manual). Joints and junctions in inner layers of multiple layer systems are not required to be stopped.
- Paper tape must be used in fire rated and wet area systems.
- Stop exposed fasteners on face layers.

Caulking

Caulk perimeter gaps and penetrations in fire rated and acoustic walls with H.B. Fuller Firesound sealant (refer Knauf online CAD Finder for details).

Decorating

Apply paint or other decorative finishes as required. Refer to Knauf Plasterboard Installation Manual for recommendations on decoration of plasterboard.

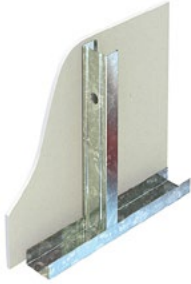
Wall Construction Notes

- Steel stud wall systems are non load bearing (NLB) unless noted otherwise.
- Wall systems should not be used where conditions of constant excessive moisture or humidity are prevalent ie, in excess of 90% relative humidity.
- Movement joints in plasterboard are required at building construction joint locations. Control joints in plasterboard are required at not more than 12 metre maximum centres, at change in framing substrate material and at building structure joint locations e.g. expansion or control joint.
- All fire rated penetrations must be installed in accordance with approved manufacturer's specifications e.g. dampers, pipes and fire doors etc. Refer to Knauf for specific details and information.
- Fire rated systems must be assembled strictly in accordance with relevant test reports, opinions, approved system details and specifications.
- Steel Studs in fire rated partitions are not to be fastened to top and bottom tracks (UNO) except boxed studs facing fire door openings, in which case the boxed studs are pop riveted to the tracks.
- Steel wall framing must be constructed to Rondo specifications and spaced at 600 mm centres maximum.
- Components must not be used if fractured or damaged.
- Butt joints to be backed by stud or nogging for fire rated systems.
- Mid span nogging is recommended for erection purposes for steel stud walls greater than 3600 mm.

LINED ONE SIDE

SO.1

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x10 mm non-fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: NA

ACOUSTIC RATINGS BASIS: RT&A TE405-20S04(R4)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	10 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SO.1A	1x10 mm SHEETROCK ONE	NA	Nil	26(23)
SO.1E	1x10 mm SHEETROCK PLUS	NA	Nil	28(25)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

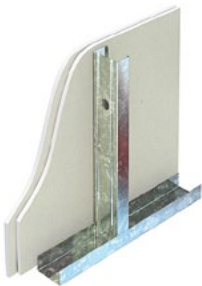
PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	600 (NOGGED)					
	STUD SPACING mm	51	64	76	92	150
0.50	2320 d	2720 d	NA	NA	NA	NA
0.55	NA	NA	3200 2d	3610 2s	NA	NA
0.75	NA	3130 d	3580 2d	4130 2d	5330 2h	5330 2h
1.15	NA	3530 d	4050 2d	4690 2d	5330 2h	5330 2h

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2h – head track capacity (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings)

SO.2

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2x10 mm non-fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: NA

ACOUSTIC RATINGS BASIS: RT&A TE405-20S04(R4)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	20 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SO.2A	2x10 mm SHEETROCK ONE	NA	Nil	32(27)
SO.2D	2x10 mm SHEETROCK PLUS	NA	Nil	34(31)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

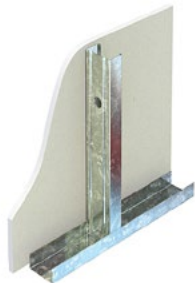
BASE METAL THICKNESS mm	600 (NOGGED)					
	STUD SPACING mm	51	64	76	92	150
0.50	2320 d	2720 d	NA	NA	NA	NA
0.55	NA	NA	3200 2d	3610 2s	NA	NA
0.75	NA	3130 d	3580 2d	4130 2d	5330 2h	5330 2h
1.15	NA	3530 d	4050 2d	4690 2d	5330 2h	5330 2h

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2h – head track capacity (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings)

LINED ONE SIDE

SO.3

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm non-fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: NA

ACOUSTIC RATINGS BASIS: RT&A TE405-20S04(R4)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	13 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SO.3A	1x13 mm SHEETROCK ONE	NA	Nil	27(25)
SO.3D	1x13 mm WETSTOP	NA	Nil	28(26)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2720 d	NA	NA	NA
	0.55	NA	NA	3240 2d	3610 2s	NA
	0.75	NA	3250 d	3820 2d	4180 2d	5370 2s
	1.15	NA	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

SO30.2

FIRE RESISTANCE LEVEL

NLB -/30/30

LB 30/30/30

FROM LINED SIDE ONLY

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 2x13 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: NA

ACOUSTIC RATINGS BASIS: RT&A TE405-20S04(R4)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	26 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SO30.2A	2x13 mm FIRESTOP	NA	Nil	35(32)
SO30.2B	2x13 mm MULTISTOP ONE	NA	Nil	35(33)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2720 d	NA	NA	NA
	0.55	NA	NA	3240 2d	3610 2s	NA
	0.75	NA	3250 d	3820 2d	4180 2d	5370 2s
	1.15	NA	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

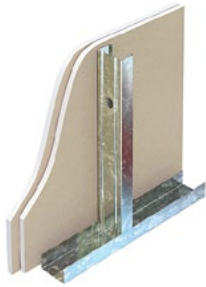
*Refer Rondo for maximum wall heights for load bearing walls

LINED ONE SIDE

SO60.1**FIRE RESISTANCE LEVEL**NLB **-/60/60**LB **60/60/60**

FROM LINED SIDE ONLY

FRL Basis: FC16109, FC15815

**SYSTEM DESCRIPTION**

Side 1: 2x16 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: NA

ACOUSTIC RATINGS BASIS: RT&A TE405-20S04(R4)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	32 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SO60.1A	2x16 mm FIRESTOP	NA	Nil	36(33)
SO60.1B	2x16 mm MULTISTOP ONE	NA	Nil	36(34)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2750 d	NA	NA	NA
	0.55	NA	NA	3250 2d	3610 2s	NA
	0.75	NA	3280 d	3870 2d	4200 2d	5370 2s
	1.15	NA	3590 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

SO90.1**FIRE RESISTANCE LEVEL**NLB **-/90/90**LB **90/90/90**

FROM LINED SIDE ONLY

FRL Basis: FC16109, FC15815

**SYSTEM DESCRIPTION**

Side 1: 3x13 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: NA

ACOUSTIC RATINGS BASIS: RT&A TE405-20S04(R4)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	39 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SO90.1A	3x13 mm FIRESTOP	NA	Nil	38(36)
SO90.1B	3x13 mm MULTISTOP ONE	NA	Nil	39(36)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2720 d	NA	NA	NA
	0.55	NA	NA	3240 2d	3610 2s	NA
	0.75	NA	3250 d	3820 2d	4180 2d	5370 2s
	1.15	NA	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

LINED ONE SIDE

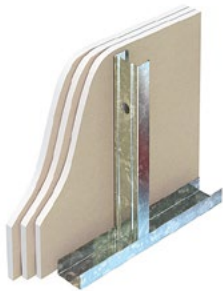
SO120.1**FIRE RESISTANCE LEVEL**

NLB -/120/120

LB 120/120/120

FROM LINED SIDE ONLY

FRL Basis: FC16109, FC15815

**SYSTEM DESCRIPTION****Side 1:** 3x16 mm fire resistant pbd**Framing:** Steel studs**Insulation:** Refer to table**Side 2:** NA**ACOUSTIC RATINGS** BASIS: RT&A TE405-20S04(R4)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	48 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SO120.1A	3x16 mm FIRESTOP	NA	Nil	39(37)
SO120.1B	3x16 mm MULTISTOP ONE	NA	Nil	40(38)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2750 d	NA	NA	NA
	0.55	NA	NA	3250 2d	3610 2s	NA
	0.75	NA	3280 d	3870 2d	4200 2d	5370 2s
	1.15	NA	3590 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

FIBEROCK® AQUA-TOUGH™ – LINED ONE SIDE

SOF.3

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK
AQUA-TOUGH
Framing: Steel studs
Insulation: Refer to table
Side 2: NA

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	13 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SOF.3A	1x13 mm FIBEROCK AQUA-TOUGH	NA	Nil	30(27)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2720 d	NA	NA	NA
	0.55	NA	NA	3240 2d	3610 2s	NA
	0.75	NA	3250 d	3820 2d	4180 2d	5370 2s
	1.15	NA	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

SOF30.1

FIRE RESISTANCE LEVEL
NLB –/30/30
FROM LINED SIDE ONLY

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x16 mm FIBEROCK
AQUA-TOUGH
Framing: Steel studs
Insulation: Refer to table
Side 2: NA

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	16 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SOF30.1A	1x16 mm FIBEROCK AQUA-TOUGH	NA	Nil	30(28)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2750 s	NA	NA	NA
	0.55	NA	NA	3250 2d	3610 2s	NA
	0.75	NA	3280 d	3870 2d	4200 2d	5370 2s
	1.15	NA	3590 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

FIBEROCK® AQUA-TOUGH™ – LINED ONE SIDE

SOF60.1**FIRE RESISTANCE LEVEL**

NLB -/60/60

LB 60/60/60

FROM LINED SIDE ONLY

FRL Basis: Contact Knauf

**SYSTEM DESCRIPTION**Side 1: 2x16 mm FIBEROCK
AQUA-TOUGH

Framing: Steel studs

Insulation: Refer to table

Side 2: NA

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	32 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SOF60.1A	2x16 mm FIBEROCK AQUA-TOUGH	NA	Nil	36(33)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2720 d	NA	NA	NA
	0.55	NA	NA	3240 2d	3610 2s	NA
	0.75	NA	3250 d	3820 2d	4180 2d	5370 2s
	1.15	NA	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

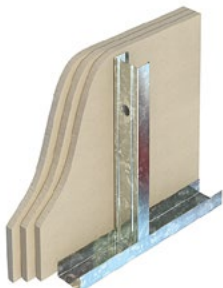
SOF90.1**FIRE RESISTANCE LEVEL**

NLB -/90/90

LB 90/90/90

FROM LINED SIDE ONLY

FRL Basis: Contact Knauf

**SYSTEM DESCRIPTION**Side 1: 3x16 mm FIBEROCK
AQUA-TOUGH

Framing: Steel studs

Insulation: Refer to table

Side 2: NA

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	48 + STUD
			STUD SIZE mm	ANY STUD
			INSULATION	$R_w(R_w+C_{tr})$
SOF90.1A	3x16 mm FIBEROCK AQUA-TOUGH	NA	Nil	40(38)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)					
	STUD SIZE mm	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2320 d	2750 d	NA	NA	NA
	0.55	NA	NA	3250 2d	3610 2s	NA
	0.75	NA	3280 d	3870 2d	4200 2d	5370 2s
	1.15	NA	3590 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), s – permissible strength, 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

LINED BOTH SIDES

SB.1

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x10 mm non-fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x10 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9) & SLR-SR-S-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	71	84	96	112	170
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	$R_w(R_w+C_{t1})$				
SB.1A	1x10 mm SHEETROCK ONE	1x10 mm SHEETROCK ONE	Nil	27(18)	28(19)	29(20)	30(21)	31(25)
			KI 50G11	34(24)	35(25)	36(26)	37(27)	38(31)
			KI 75G11	-	-	37(27)	38(28)	39(32)
			KI 90G11	-	-	-	38(28)	39(32)
SB.1H	1x10 mm SHEETROCK PLUS	1x10 mm SHEETROCK PLUS	Nil	33(25)	34(26)	34(26)	35(27)	36(30)
			KI 50G11	40(29)	41(30)	42(33)	43(34)	44(37)
			KI 75G11	-	-	43(34)	44(35)	45(38)
			KI 90G11	-	-	-	44(35)	45(38)
SB.1I	1x10 mm SHEETROCK ONE	1x10 mm SHEETROCK PLUS	Nil	30(21)	31(22)	32(23)	33(24)	34(28)
			KI 50G11	37(27)	38(28)	39(29)	40(30)	41(34)
			KI 75G11	-	-	40(30)	41(31)	42(35)
			KI 90G11	-	-	-	41(31)	42(35)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

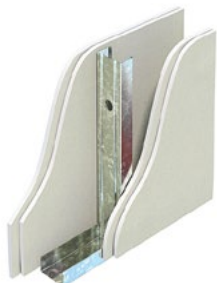
STUD SPACING mm	STUD SIZE mm	400					600				
		51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3130 d	3690 d	NA	NA	NA	2770 d	3330 d	NA	NA	NA
	0.55	NA	NA	4160 d	4990 d	NA	NA	NA	3700 d	4540 d	NA
	0.75	NA	4280 d	4930 d	5460 d	7340 2d	NA	3930 d	4430 d	4830 d	5330 h
	1.15	NA	4590 d	5240 d	5840 d	7970 2h	NA	4170 d	4650 d	5110 d	5330 h

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), h – head track capacity, 2h – head track capacity (2 rows of noggings)

LINED BOTH SIDES

SB.2

NON-FIRE RATED



SYSTEM DESCRIPTION

- Side 1:** 2x10 mm non-fire resistant pbd
- Framing:** Steel studs
- Insulation:** Refer to table
- Side 2:** 2x10 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9) & SLR-SR-S-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	91	104	116	132	190
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB.2A	2x10 mm SHEETROCK ONE	2x10 mm SHEETROCK ONE	Nil	34(25)	35(26)	36(27)	37(28)	38(32)
			KI 50G11	41(31)	42(32)	43(33)	44(34)	45(38)
			KI 75G11	-	-	44(34)	45(35)	46(39)
			KI 90G11	-	-	-	45(35)	46(39)
SB.2H	2x10 mm SHEETROCK PLUS	2x10 mm SHEETROCK PLUS	Nil	39(30)	39(30)	40(31)	41(32)	42(35)
			KI 50G11	46(36)	47(38)	48(39)	48(41)	49(44)
			KI 75G11	-	-	49(40)	49(42)	50(45)
			KI 90G11	-	-	-	50(43)	51(46)
SB.2I	2x10 mm SHEETROCK ONE	2x10 mm SHEETROCK PLUS	Nil	37(28)	38(29)	39(30)	40(31)	41(35)
			KI 50G11	44(34)	45(35)	46(36)	47(37)	48(41)
			KI 75G11	-	-	47(37)	48(38)	49(42)
			KI 90G11	-	-	-	48(38)	49(43)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3130 d	3690 d	NA	NA	NA	2770 d	3330 d	NA	NA	NA
	0.55	NA	NA	4160 d	4990 d	NA	NA	NA	3700 d	4540 d	NA
	0.75	NA	4280 d	4930 d	5460 d	7340 2d	NA	3930 d	4430 d	4830 d	5330 h
	1.15	NA	4590 d	5240 d	5840 d	7970 2h	NA	4170 d	4650 d	5110 d	5330 h

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), h – head track capacity, 2h – head track capacity (2 rows of noggings)

LINED BOTH SIDES

SB.3

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm non-fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	77	90	102	118	176
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB.3A	1x13 mm SHEETROCK ONE	1x13 mm SHEETROCK ONE	Nil	35(28)	36(28)	37(29)	37(29)	38(32)
			KI 50G11	40(30)	41(31)	43(33)	44(35)	45(38)
			KI 75G11	-	-	44(34)	45(36)	46(39)
			KI 90G11	-	-	-	45(36)	46(39)
SB.3B	1x13 mm WETSTOP	1x13 mm WETSTOP	Nil	36(29)	37(30)	38(30)	38(31)	39(34)
			KI 50G11	42(31)	43(33)	44(35)	45(36)	46(39)
			KI 75G11	-	-	45(36)	46(37)	47(40)
			KI 90G11	-	-	-	46(37)	47(40)
SB.3E	1x13 mm SHEETROCK ONE	1x13 mm WETSTOP	Nil	35(28)	36(29)	37(29)	37(30)	38(33)
			KI 50G11	40(31)	41(32)	43(34)	44(35)	45(38)
			KI 75G11	-	-	44(35)	45(36)	46(39)
			KI 90G11	-	-	-	45(36)	46(39)
SB.3K	1x13 mm SHEETROCK ONE	1x13 mm IMPACTSTOP	Nil	37(29)	38(30)	38(30)	39(31)	40(34)
			KI 50G11	43(32)	44(34)	45(37)	45(37)	46(40)
			KI 75G11	-	-	46(38)	46(38)	47(41)
			KI 90G11	-	-	-	46(38)	47(41)
SB.3L	1x13 mm WETSTOP	1x13 mm IMPACTSTOP	Nil	37(30)	38(30)	39(31)	40(32)	41(35)
			KI 50G11	43(32)	44(35)	45(37)	46(38)	47(41)
			KI 75G11	-	-	46(38)	47(39)	48(42)
			KI 90G11	-	-	-	47(39)	48(42)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	STUD SPACING mm	400					600				
		STUD SIZE mm	51	64	76	92	150	51	64	76	92
0.50	0.50	3510 d	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5450 d	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

LINED BOTH SIDES

SB.4

NON-FIRE RATED



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm non-fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 2x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	90	103	115	131	189
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB.4A	1x13 mm SHEETROCK ONE	2x13 mm SHEETROCK ONE	Nil	37(29)	39(30)	39(30)	40(31)	41(34)
			KI 50G11	43(31)	45(34)	45(34)	46(35)	47(38)
			KI 75G11	-	-	46(35)	47(36)	48(39)
			KI 90G11	-	-	-	48(37)	49(40)
SB.4B	1x13 mm WETSTOP	2x13 mm WETSTOP	Nil	38(29)	39(30)	40(31)	41(31)	42(34)
			KI 50G11	44(32)	46(35)	46(35)	47(37)	48(40)
			KI 75G11	-	-	47(36)	48(38)	49(41)
			KI 90G11	-	-	-	49(39)	50(42)
SB.4E	1x13 mm SHEETROCK ONE	2x13 mm WETSTOP	Nil	38(29)	39(29)	40(31)	41(32)	42(35)
			KI 50G11	43(31)	45(34)	46(34)	47(36)	48(39)
			KI 75G11	-	-	47(35)	48(37)	49(40)
			KI 90G11	-	-	-	49(38)	50(41)
SB.4K	1x13 mm SHEETROCK ONE	2x13 mm IMPACTSTOP	Nil	40(31)	41(32)	42(33)	43(33)	44(36)
			KI 50G11	46(34)	48(37)	48(38)	49(39)	50(42)
			KI 75G11	-	-	49(39)	50(40)	51(43)
			KI 90G11	-	-	-	51(41)	52(44)
SB.4L	1x13 mm WETSTOP	2x13 mm IMPACTSTOP	Nil	40(31)	41(32)	42(33)	43(33)	44(36)
			KI 50G11	46(34)	48(37)	48(38)	49(39)	50(42)
			KI 75G11	-	-	49(39)	50(40)	51(43)
			KI 90G11	-	-	-	51(41)	52(44)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3510 d	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5450 d	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

LINED BOTH SIDES

SB.5

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2x13 mm non-fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 2x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	103	116	128	144	202
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB.5A	2x13 mm SHEETROCK ONE	2x13 mm SHEETROCK ONE	Nil	42(34)	43(35)	44(36)	45(36)	46(39)
			KI 50G11	47(36)	48(39)	49(40)	50(41)	51(44)
			KI 75G11	-	-	50(41)	51(42)	52(45)
			KI 90G11	-	-	-	52(43)	53(46)
SB.5B	2x13 mm WETSTOP	2x13 mm WETSTOP	Nil	44(36)	44(36)	45(36)	46(37)	47(40)
			KI 50G11	48(38)	49(41)	50(41)	50(43)	51(46)
			KI 75G11	-	-	51(42)	51(44)	52(47)
			KI 90G11	-	-	-	52(45)	53(48)
SB.5E	2x13 mm SHEETROCK ONE	2x13 mm WETSTOP	Nil	43(35)	44(35)	45(36)	45(36)	46(39)
			KI 50G11	47(37)	49(40)	49(41)	50(42)	51(45)
			KI 75G11	-	-	50(42)	51(43)	52(46)
			KI 90G11	-	-	-	52(44)	53(47)
SB.5L	2x13 mm SHEETROCK ONE	2x13 mm IMPACTSTOP	Nil	45(37)	45(37)	46(37)	47(38)	48(41)
			KI 50G11	48(39)	50(42)	50(42)	51(44)	52(47)
			KI 75G11	-	-	51(43)	52(45)	53(48)
			KI 90G11	-	-	-	53(46)	54(49)
SB.5I	2x13 mm WETSTOP	2x13 mm IMPACTSTOP	Nil	45(37)	46(37)	47(38)	47(38)	49(41)
			KI 50G11	49(40)	50(42)	50(43)	51(44)	52(47)
			KI 75G11	-	-	51(44)	52(45)	53(48)
			KI 90G11	-	-	-	53(46)	54(49)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		400					600				
STUD SIZE mm		51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3510 d	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5450 d	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

LINED BOTH SIDES

SB30.1

FIRE RESISTANCE LEVEL
 NLB -/30/30
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1: 1x13 mm fire resistant pbd
- Framing: Steel studs
- Insulation: Refer to table
- Side 2: 1x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778 01S02(R9)

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	77	90	102	118	176
			STUD SIZE mm	51	64	76	92	150
			INSULATION	R _w (R _w +C _{tr})				
SB30.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP	Nil	37(29)	38(30)	38(30)	39(31)	40(34)
SB30.1B	1x13 mm MULTISTOP ONE	1x13 mm MULTISTOP ONE	Nil	38(30)	39(31)	40(32)	41(33)	42(36)
SB30.1C	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE	Nil	37(30)	38(30)	39(31)	40(32)	41(35)
SB30.1D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP	Nil	38(30)	39(31)	40(32)	41(33)	42(36)
SB30.1E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP	Nil	37(30)	38(30)	39(31)	40(32)	41(35)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3500 f	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5300 f	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

SB30.2

FIRE RESISTANCE LEVEL
 NLB -/30/30
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1: 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD
- Framing: Steel studs
- Insulation: Refer to table
- Side 2: 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TK778 01S02(R9)

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	89	102	114	130	188
			STUD SIZE mm	51	64	76	92	150
			INSULATION	R _w (R _w +C _{tr})				
SB30.2B	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	Nil	44(36)	45(36)	46(37)	47(37)	48(40)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3500 f	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5300 f	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

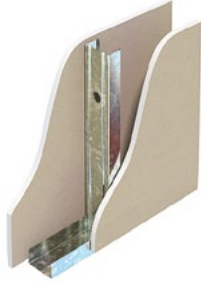
For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

LINED BOTH SIDES

SB60.1

FIRE RESISTANCE LEVEL
 NLB -/60/60*
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	77	90	102	118	176
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB60.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP	KI 50G11	43(33)	44(35)	45(37)	45(37)	46(40)
			KI 75G11	-	-	47(38)	47(38)	48(41)
			KI 90G11	-	-	-	47(38)	48(41)
SB60.1B	1x13 mm MULTISTOP ONE	1x13 mm MULTISTOP ONE	KI 50G11	44(34)	45(37)	46(37)	47(39)	48(42)
			KI 75G11	-	-	47(38)	48(40)	49(43)
			KI 90G11	-	-	-	48(40)	49(43)
SB60.1C	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE	KI 50G11	43(34)	45(36)	46(37)	47(38)	48(41)
			KI 75G11	-	-	47(38)	48(39)	49(42)
			KI 90G11	-	-	-	48(39)	49(42)
SB60.1D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP	KI 50G11	44(34)	45(37)	46(37)	47(39)	48(42)
			KI 75G11	-	-	47(38)	48(40)	49(43)
			KI 90G11	-	-	-	48(40)	49(43)
SB60.1E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP	KI 50G11	43(34)	45(36)	46(37)	47(38)	48(41)
			KI 75G11	-	-	47(38)	48(39)	49(42)
			KI 90G11	-	-	-	48(39)	49(42)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3500 f	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5300 f	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

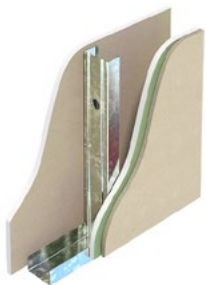
*Refer Rondo for maximum heights for load bearing walls

LINED BOTH SIDES

SB60.2

FIRE RESISTANCE LEVEL
 NLB -/60/60*
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIRESTOP
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x13 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	83	96	108	124	182
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB60.2B	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 90G11	-	-	-	50(40)	-

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	STUD SPACING mm					STUD SIZE mm					
	400					600					
	0.50	51	64	76	92	150	51	64	76	92	150
0.50	3500 f	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA	NA
0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA	NA
0.75	NA	4530 d	5300 f	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d	NA
1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d	NA

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

SB60.3

FIRE RESISTANCE LEVEL
 NLB -/60/60*
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x13 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	89	102	114	130	188
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB60.3B	1x13 mm MULTISTOP ONE + 1x16 mm VILLABOARD	1x13 mm MULTISTOP ONE + 1x16 mm VILLABOARD	KI 50G11	53(43)	50(39)	52(42)	52(42)	54(46)
			KI 75G11	-	-	53(43)	54(45)	55(48)
			KI 90G11	-	-	-	55(46)	56(49)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	STUD SPACING mm					STUD SIZE mm					
	400					600					
	0.50	51	64	76	92	150	51	64	76	92	150
0.50	3500 f	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA	NA
0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA	NA
0.75	NA	4530 d	5300 f	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d	NA
1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d	NA

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls

LINED BOTH SIDES

SB60.4

FIRE RESISTANCE LEVEL
 NLB **-/60/60**
 LB **30/30/30**
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778 01S02(R9)

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	90	103	115	131	189
				STUD SIZE mm				
				INSULATION				
SB60.4A	1x13 mm FIRESTOP	2x13 mm FIRESTOP	Nil	39(31)	40(32)	41(33)	41(33)	42(36)
SB60.4B	1x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE		40(33)	42(34)	42(35)	43(36)	44(39)
SB60.4C	1x13 mm FIRESTOP	2x13 mm MULTISTOP ONE		40(32)	41(34)	42(35)	43(35)	44(38)
SB60.4D	1x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP		40(33)	42(34)	42(35)	43(36)	44(39)
SB60.4E	1x13 mm FIRESTOP	2x13 mm IMPACTSTOP		40(32)	41(34)	42(35)	43(35)	44(38)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2900 f	3500 f	NA	NA	NA	2900 f	3500 f	NA	NA	NA
	0.55	NA	NA	4100 f	5100 f	NA	NA	NA	4100 f	4940 d	NA
	0.75	NA	3900 f	4500 f	5200 f	7500 f	NA	3900 f	4500 f	5200 f	6990 2d
	1.15	NA	4300 f	5000 f	5800 f	8190 2d	NA	4300 f	5000 f	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls

SB60.5

FIRE RESISTANCE LEVEL
 NLB **-/60/60**
 LB **60/60/60 ACR 20%**
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x16 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778 01S02(R9)

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	83	96	108	124	182
				STUD SIZE mm				
				INSULATION				
SB60.5A	1x16 mm FIRESTOP	1x16 mm FIRESTOP	Nil	38(31)	39(32)	40(33)	41(33)	42(36)
SB60.5B	1x16 mm MULTISTOP ONE	1x16 mm MULTISTOP ONE		38(31)	39(33)	40(34)	41(34)	42(37)
SB60.5C	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE		38(31)	39(33)	40(34)	41(34)	42(37)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3400 f	4100 f	NA	NA	NA	3390 d	3910 d	NA	NA	NA
	0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
	0.75	NA	4500 f	5200 f	6100 f	7750 2d	NA	4350 d	5260 d	5710 d	7190 2d
	1.15	NA	4950 d	5800 f	6580 d	8300 2d	NA	4520 d	5420 d	5930 d	7630 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

LINED BOTH SIDES

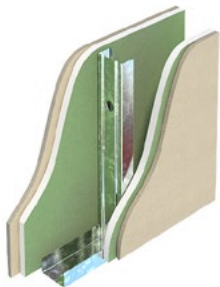
SB60.6

FIRE RESISTANCE LEVEL

NLB -/60/60

LB 60/60/60 ACR 20%
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x16 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD

Framing: Steel studs

Insulation: Refer to table

Side 2: 1x16 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TK778 01S02(R9)

Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	95	108	120	136	194
			STUD SIZE mm	51	64	76	92	150
			INSULATION	$R_w(R_w+C_{tr})$				
SB60.6B	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	Nil	45(37)	46(38)	47(38)	47(39)	48(42)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3400 f	4100 f	NA	NA	NA	3390 d	3910 d	NA	NA	NA
	0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
	0.75	NA	4500 f	5200 f	6100 f	7750 2d	NA	4350 d	5260 d	5710 d	7190 2d
	1.15	NA	4950 d	5800 f	6580 d	8300 2d	NA	4520 d	5420 d	5930 d	7630 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

SB90.1

FIRE RESISTANCE LEVEL

NLB -/90/90*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd

Framing: Steel studs

Insulation: Refer to table

Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	90	103	115	131	189
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	$R_w(R_w+C_{tr})$				
SB90.1A	1x13 mm FIRESTOP	2x13 mm FIRESTOP	KI 50G11	46(36)	47(37)	48(39)	49(40)	50(43)
			KI 75G11	-	-	49(40)	50(41)	51(44)
			KI 90G11	-	-	-	51(42)	52(45)
SB90.1B	1x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	KI 50G11	48(40)	49(40)	50(42)	51(43)	52(46)
			KI 75G11	-	-	51(43)	52(44)	53(47)
			KI 90G11	-	-	-	53(45)	54(48)
SB90.1C	1x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	KI 50G11	48(39)	49(39)	50(41)	51(42)	52(45)
			KI 75G11	-	-	51(42)	52(43)	53(46)
			KI 90G11	-	-	-	53(44)	54(47)
SB90.1D	1x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	KI 50G11	48(40)	49(40)	50(42)	51(43)	52(46)
			KI 75G11	-	-	51(43)	52(44)	53(47)
			KI 90G11	-	-	-	53(45)	54(48)
SB90.1E	1x13 mm FIRESTOP	2x13 mm IMPACTSTOP	KI 50G11	48(39)	49(39)	50(41)	51(42)	52(45)
			KI 75G11	-	-	51(42)	52(43)	53(46)
			KI 90G11	-	-	-	53(44)	54(47)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2900 f	3500 f	NA	NA	NA	2900 f	3500 f	NA	NA	NA
	0.55	NA	NA	4100 f	5100 f	NA	NA	NA	4100 f	4940 d	NA
	0.75	NA	3900 f	4500 f	5200 f	7500 f	NA	3900 f	4500 f	5200 f	6990 2d
	1.15	NA	4300 f	5000 f	5800 f	8190 2d	NA	4300 f	5000 f	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls

LINED BOTH SIDES

SB90.2

FIRE RESISTANCE LEVEL
 NLB **-/90/90***
 LB **60/60/60** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x16 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	83	96	108	124	182
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB90.2A	1x16 mm FIRESTOP	1x16 mm FIRESTOP	KI 50G11	44(36)	45(37)	46(38)	47(39)	48(42)
			KI 75G11	-	-	47(39)	48(40)	49(43)
			KI 90G11	-	-	-	48(40)	49(43)
SB90.2B	1x16 mm MULTISTOP ONE	1x16 mm MULTISTOP ONE	KI 50G11	45(39)	46(39)	47(41)	47(42)	48(45)
			KI 75G11	-	-	48(42)	48(43)	49(46)
			KI 90G11	-	-	-	48(43)	49(46)
SB90.2C	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE	KI 50G11	45(38)	45(38)	46(40)	47(42)	48(45)
			KI 75G11	-	-	47(41)	48(43)	49(46)
			KI 90G11	-	-	-	48(43)	49(46)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3400 f	4100 f	NA	NA	NA	3390 d	3910 d	NA	NA	NA
	0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
	0.75	NA	4500 f	5200 f	6100 f	7750 2d	NA	4350 d	5260 d	5710 d	7190 2d
	1.15	NA	4950 d	5800 f	6580 d	8300 2d	NA	4520 d	5420 d	5930 d	7630 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

SB90.3

FIRE RESISTANCE LEVEL
 NLB **-/90/90***
 LB **60/60/60** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x16 mm MULTISTOP ONE
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	89	102	114	130	188
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB90.3B	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	-	-	-	51(43)	-

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3400 f	4100 f	NA	NA	NA	3390 d	3910 d	NA	NA	NA
	0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
	0.75	NA	4500 f	5200 f	6100 f	7750 2d	NA	4350 d	5260 d	5710 d	7190 2d
	1.15	NA	4950 d	5800 f	6580 d	8300 2d	NA	4520 d	5420 d	5930 d	7630 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

LINED BOTH SIDES

SB90.4

FIRE RESISTANCE LEVEL
 NLB **-/90/90⁺**
 LB **60/60/60** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD
- Framing:** Steel studs
- Insulation:** Refer to table
- Side 2:** 1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	95	108	120	136	194
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB90.4B	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	51(41)	52(43)	52(44)	53(45)	54(48)
			KI 75G11	-	-	53(45)	54(46)	55(49)
			KI 90G11	-	-	-	55(47)	56(50)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density
 + Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		400					600				
STUD SIZE mm		51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3400 f	4100 f	NA	NA	NA	3390 d	3910 d	NA	NA	NA
	0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
	0.75	NA	4500 f	5200 f	6100 f	7750 2d	NA	4350 d	5260 d	5710 d	7190 2d
	1.15	NA	4950 d	5800 f	6580 d	8300 2d	NA	4520 d	5420 d	5930 d	7630 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

SB120.1

FIRE RESISTANCE LEVEL
 NLB **-/120/120**
 LB **90/90/90**
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1:** 2x13 mm fire resistant pbd
- Framing:** Steel studs
- Insulation:** Refer to table
- Side 2:** 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	103	116	128	144	202
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SB120.1A	2x13 mm FIRESTOP	2x13 mm FIRESTOP	Nil	44(36)	45(37)	46(37)	47(38)	48(41)
			KI 50G11	51(41)	52(43)	52(44)	53(45)	54(48)
			KI 75G11	-	-	53(44)	54(45)	55(48)
			KI 90G11	-	-	-	55(46)	56(49)
SB120.1B	2x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	Nil	46(38)	47(39)	47(39)	48(39)	49(42)
			KI 50G11	52(43)	53(44)	53(45)	54(47)	55(50)
			KI 75G11	-	-	54(46)	55(47)	56(50)
			KI 90G11	-	-	-	56(48)	57(51)
SB120.1C	2x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	Nil	45(38)	46(38)	47(38)	47(39)	48(37)
			KI 50G11	51(42)	52(43)	53(44)	53(45)	54(45)
			KI 75G11	-	-	54(45)	54(46)	55(46)
			KI 90G11	-	-	-	55(47)	56(47)
SB120.1D	2x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	Nil	46(38)	47(39)	47(39)	48(39)	49(42)
			KI 50G11	52(43)	53(44)	53(45)	54(47)	55(50)
			KI 75G11	-	-	54(46)	55(47)	56(50)
			KI 90G11	-	-	-	56(48)	57(51)
SB120.1E	2x13 mm FIRESTOP	2x13 mm IMPACTSTOP	Nil	45(38)	46(38)	47(38)	47(39)	48(37)
			KI 50G11	51(42)	52(43)	53(44)	53(45)	54(45)
			KI 75G11	-	-	54(45)	54(46)	55(46)
			KI 90G11	-	-	-	55(47)	56(47)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		400					600				
STUD SIZE mm		51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	2600 f	3100 f	NA	NA	NA	2600 f	3100 f	NA	NA	NA
	0.55	NA	NA	3700 f	4600 f	NA	NA	NA	3700 f	4600 f	NA
	0.75	NA	3500 f	4000 f	4700 f	6700 f	NA	3500 f	4000 f	4700 f	6700 f
	1.15	NA	3900 f	4500 f	5200 f	7700 f	NA	3900 f	4500 f	5200 f	7520 2d

Height Limiting Factor: 2d – deflection (2 rows noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector

LINED BOTH SIDES

SB120.2

FIRE RESISTANCE LEVEL
 NLB **-/120/120**
 LB **120/120/120** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815

**SYSTEM DESCRIPTION**

Side 1: 2x16 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 2x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TK778-01S02(R9)

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	115	128	140	156	214
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	$R_w(R_w+C_{tr})$				
SB120.2	2x16 mm FIRESTOP	2x16 mm FIRESTOP	Nil	45(38)	46(38)	47(39)	48(39)	49(42)
			KI 50G11	52(42)	53(44)	53(45)	54(46)	55(49)
			KI 75G11	-	-	54(45)	55(46)	56(49)
			KI 90G11	-	-	-	56(47)	57(50)
SB120.2B	2x16 mm MULTISTOP ONE	2x16 mm MULTISTOP ONE	Nil	47(39)	48(40)	48(40)	49(41)	50(44)
			KI 50G11	53(44)	54(45)	54(46)	55(47)	56(50)
			KI 75G11	-	-	55(47)	56(48)	57(51)
			KI 90G11	-	-	-	57(49)	58(52)
SB120.2C	2x16 mm FIRESTOP	2x16 mm MULTISTOP ONE	Nil	46(38)	47(39)	48(39)	49(40)	50(43)
			KI 50G11	52(43)	53(45)	54(45)	54(46)	55(49)
			KI 75G11	-	-	55(46)	55(47)	56(50)
			KI 90G11	-	-	-	56(48)	57(51)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3620 d	4220 d	NA	NA	NA	3380 d	3910 d	NA	NA	NA
	0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
	0.75	3750 d	4710 d	5710 d	6280 d	7750 2d	3520 d	4350 d	5250 d	5710 d	7190 2d
	1.15	NA	4950 d	5950 d	6580 d	8300 2d	NA	4520 d	5420 d	5920 d	7650 2d

Height Limiting Factor: d – deflection 2d – deflection (2 rows nogging)

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

LINED BOTH SIDES

SB180.4**FIRE RESISTANCE LEVEL**

NLB -/180/180

LB 120/120/120

FROM BOTH SIDES

FRL Basis: FC16109, FC15815

**SYSTEM DESCRIPTION****Side 1:** 3x16 mm fire resistant pbd**Framing:** Steel studs**Insulation:** Refer to table**Side 2:** 3x16 mm fire resistant pbd**ACOUSTIC RATINGS** BASIS: RT&A TK778-15F01Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	-	142	154	170	228
			STUD SIZE mm	-	64	76	92	150
			INSULATION*	$R_w(R_w+C_{tr})$				
SB180.4A	3x16 mm FIRESTOP	3x16 mm FIRESTOP	Nil	-	52(44)	52(45)	53(46)	54(48)
			KI 50G11	-	57(49)	57(50)	58(52)	59(54)
			KI 75G11	-	-	58(51)	58(52)	59(54)
			KI 90G11	-	-	-	58(52)	59(54)
SB180.4B	3x16 mm MULTISTOP ONE	3x16 mm MULTISTOP ONE	Nil	-	53(45)	53(46)	54(47)	55(49)
			KI 50G11	-	58(50)	58(51)	59(53)	60(55)
			KI 75G11	-	-	59(52)	59(53)	60(55)
			KI 90G11	-	-	-	59(53)	60(55)
SB180.4C	3x16 mm FIRESTOP	3x16 mm MULTISTOP ONE	Nil	-	52(44)	52(45)	53(46)	54(48)
			KI 50G11	-	57(49)	57(50)	58(52)	59(54)
			KI 75G11	-	-	58(51)	58(52)	59(54)
			KI 90G11	-	-	-	58(52)	59(54)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density**MAX WALL HEIGHTS** NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	NA	64	76	92	150	NA	64	76	92	150	
BASE METAL THICKNESS mm	0.50	NA	2300 f	NA	NA	NA	NA	2300 f	NA	NA	NA
	0.55	NA	NA	2700 f	3500 f	NA	NA	NA	2700 f	3500 f	NA
	0.75	NA	2700 f	3000 f	3500 f	5000 f	NA	2700 f	3000 f	3500 f	5000 f
	1.15	NA	3000 f	3500 f	4000 f	5900 f	NA	3000 f	3500 f	4000 f	5900 f

Height Limiting Factor: f – fire height

*Refer Rondo for maximum heights for load bearing walls

FIBEROCK® AQUA-TOUGH™ – LINED BOTH SIDES

SBF30.1

FIRE RESISTANCE LEVEL
 NLB **-/30/30**
 LB **30/30/30**
 FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK AQUA-TOUGH
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	77	90	102	118	176
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SBF30.1A	1x13 mm FIBEROCK AQUA-TOUGH	1x13 mm FIBEROCK AQUA-TOUGH	Nil	38(31)	39(31)	40(32)	41(33)	41(34)
			KI 50G11	41(35)	42(36)	43(37)	46(39)	46(41)
			KI 75G11	-	-	46(39)	47(41)	47(42)
			KI 90G11	-	-	-	48(41)	48(42)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3510 d	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5450 d	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

SBF30.2

FIRE RESISTANCE LEVEL
 NLB **-/30/30**
 LB **30/30/30**
 FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK AQUA-TOUGH
Framing: Steel studs
Insulation: Refer to table
Side 2: 2x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	90	103	115	131	189
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SBF30.2A	1x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	41(33)	43(34)	44(35)	45(37)	46(38)
			KI 50G11	46(38)	46(39)	47(39)	49(42)	49(43)
			KI 75G11	-	-	50(41)	50(43)	50(43)
			KI 90G11	-	-	-	52(44)	52(45)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3510 d	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5450 d	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

FIBEROCK® AQUA-TOUGH™ – LINED BOTH SIDES

SBF60.1

FIRE RESISTANCE LEVEL
 NLB **-/60/60**
 LB **60/60/60**
 FROM BOTH SIDES

FRL Basis: Conatct Knauf



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm FIBEROCK AQUA-TOUGH
- Framing:** Steel studs
- Insulation:** Refer to table
- Side 2:** 1x16 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	83	96	108	124	182
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SBF60.1A	1x16 mm FIBEROCK AQUA-TOUGH	1x16 mm FIBEROCK AQUA-TOUGH	Nil	40(32)	41(33)	42(34)	43(35)	42(35)
			KI 50G11	45(37)	45(38)	46(40)	47(41)	47(42)
			KI 75G11	-	-	48(42)	48(42)	48(43)
			KI 90G11	-	-	-	49(43)	49(44)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	STUD SPACING mm					STUD SPACING mm				
	400					600				
	STUD SIZE mm	51	64	76	92	150	51	64	76	92
0.50	3620 d	4220 d	NA	NA	NA	3390 d	3910 d	NA	NA	NA
0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
0.75	NA	4710 d	5710 d	6280 d	7750 2d	NA	4350 d	5260 d	5710 d	7190 2d
1.15	NA	4950 d	5950 d	6580 d	8300 2d	NA	4520 d	5420 d	5930 d	7630 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls

SBF90.1[^]

FIRE RESISTANCE LEVEL
 NLB **-/90/90**
 FROM BOTH SIDES

FRL Basis: Conatct Knauf



SYSTEM DESCRIPTION

- Side 1:** 2x13 mm FIBEROCK AQUA-TOUGH
- Framing:** Steel studs
- Insulation:** Refer to table
- Side 2:** 2x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	103	116	128	144	202
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SBF90.1A	2x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	-	48(36)	49(38)	-	-
			KI 50G11	-	51(41)	51(41)	-	-
			KI 75G11	-	-	53(42)	-	-
			KI 90G11	-	-	-	-	-

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	STUD SPACING mm					STUD SPACING mm				
	400					600				
	STUD SIZE mm	51	64	76	92	150	51	64	76	92
0.50	NA	4020 d	NA	NA	NA	NA	3720 d	NA	NA	NA
0.55	NA	NA	4530 d	NA	NA	NA	NA	4130 d	NA	NA
0.75	NA	4530 d	5450 d	NA	NA	NA	4220 d	5020 d	NA	NA
1.15	NA	4810 d	5720 d	NA	NA	NA	4430 d	5220 d	NA	NA

Height Limiting Factor: d – deflection

[^]System SBF90.1 must utilise 64 mm or 76 mm studs only.

FIBEROCK® AQUA-TOUGH™ – LINED BOTH SIDES

SBF120.1[^]

FIRE RESISTANCE LEVEL
NLB **-/120/120**
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

- Side 1:** 2x13 mm FIBEROCK AQUA-TOUGH
- Framing:** Steel studs
- Insulation:** Refer to table
- Side 2:** 2x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	103	116	128	144	202
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SBF120.1A	2x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	-	-	-	50(40)	50(41)
			KI 50G11	-	-	-	52(43)	52(45)
			KI 75G11	-	-	-	54(44)	53(46)
			KI 90G11	-	-	-	55(45)	55(47)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	0.55	NA	NA	NA	4600 f	NA	NA	NA	NA	4600 f	NA
	0.75	NA	NA	NA	4700 f	6700 f	NA	NA	NA	4700 f	6700 f
	1.15	NA	NA	NA	5200 f	7700 f	NA	NA	NA	5200 f	7520 2d

Height Limiting Factor: **d** – deflection, **2d** – deflection (2 rows of noggings)

[^]System SBF120.1 must utilise 92 mm or 150 mm studs only.

SBF120.2

FIRE RESISTANCE LEVEL
NLB **-/120/120**
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

- Side 1:** 2x16 mm FIBEROCK AQUA-TOUGH
- Framing:** Steel studs
- Insulation:** Refer to table
- Side 2:** 2x16 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	115	128	140	156	214
			STUD SIZE mm	51	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})				
SBF120.2A	2x16 mm FIBEROCK AQUA-TOUGH	2x16 mm FIBEROCK AQUA-TOUGH	Nil	49(37)	50(39)	51(41)	51(42)	50(42)
			KI 50G11	51(43)	52(44)	53(45)	53(46)	52(46)
			KI 75G11	-	-	54(47)	54(48)	53(48)
			KI 90G11	-	-	-	55(49)	54(49)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3620 d	4220 d	NA	NA	NA	3390 d	3910 d	NA	NA	NA
	0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
	0.75	NA	4710 d	5710 d	6280 d	7750 2d	NA	4350 d	5260 d	5710 d	7190 2d
	1.15	NA	4950 d	5950 d	6580 d	8300 2d	NA	4520 d	5420 d	5930 d	7630 2d

Height Limiting Factor: **d** – deflection, **2d** – deflection (2 rows of noggings)

PERMAROCK® – LINED BOTH SIDES

SBP.1

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: Non-fire resistant lining
Framing: Steel studs
Insulation: Refer to table
Side 2: Non-fire resistant lining

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Studs @ 600 mm ctrs (BMT 0.5 mm / 0.7 mm)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	89.5	101.5	117.5
			STUD SIZE mm	64	76	92
			INSULATION*	R _w (R _w +C _{tr})		
SBP.1A	1x12.5 mm PERMAROCK	1x12.5 mm PERMAROCK	Nil	39(30)	40(32)	41(33)
			KI 50G11	45(35)	46(37)	47(38)
			KI 75G11	-	47(38)	48(39)
			KI 90G11	-	-	48(39)
SBP.1B	1x12.5 mm PERMAROCK	1x13 mm SHEETROCK ONE	Nil	37(27)	38(29)	39(30)
			KI 50G11	43(32)	44(34)	45(35)
			KI 75G11	-	45(35)	46(36)
			KI 90G11	-	-	46(36)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3510 d	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5450 d	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

SBP.2

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2 x Non-fire resistant lining
Framing: Steel studs
Insulation: Refer to table
Side 2: 2 x Non-fire resistant lining

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Studs @ 600 mm ctrs (BMT 0.5 mm / 0.7 mm)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	115	127	143
			STUD SIZE mm	64	76	92
			INSULATION*	R _w (R _w +C _{tr})		
SBP.2A	2x12.5 mm PERMAROCK	2x12.5 mm PERMAROCK	Nil	46(38)	47(40)	48(41)
			KI 50G11	52(43)	53(45)	54(46)
			KI 75G11	-	54(46)	55(47)
			KI 90G11	-	-	55(47)
SBP.2B	2x12.5 mm PERMAROCK	2x13 mm SHEETROCK ONE	Nil	44(35)	45(37)	46(38)
			KI 50G11	50(40)	51(42)	52(43)
			KI 75G11	-	52(43)	53(44)
			KI 90G11	-	-	53(44)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3510 d	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5450 d	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

PERMAROCK® – LINED BOTH SIDES

SBP60.1

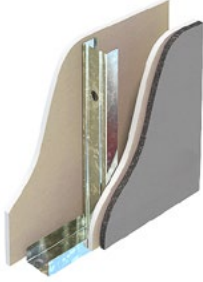
FIRE RESISTANCE LEVEL

NLB –/60/60*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: Refer to table
Framing: Steel studs
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Studs @ 600 mm ctrs (BMT 0.5 mm / 0.7 mm)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	102.5, 115	114.5, 127	130.5, 143
			STUD SIZE mm	64	76	92
			INSULATION*	R _w (R _w +C _{tr})		
SBP60.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP+ 1x12.5 mm PEARMAROCK	KI 50G11	49(38)	50(40)	51(42)
			KI 75G11	-	51(41)	52(43)
			KI 90G11	-	-	52(43)
SBP60.1B	1x13 mm FIRESTOP + 1x12.5 mm PEARMAROCK	1x13 mm FIRESTOP + 1x12.5 mm PEARMAROCK	KI 50G11	51(43)	52(44)	53(45)
			KI 75G11	-	53(45)	54(46)
			KI 90G11	-	-	54(46)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

In wet areas use MULTISTOP ONE or MULTISTOP ONE HI in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3500 f	4020 d	NA	NA	NA	3200 d	3720 d	NA	NA	NA
	0.55	NA	NA	4530 d	5330 d	NA	NA	NA	4130 d	4940 d	NA
	0.75	NA	4530 d	5300 f	6050 d	7610 2d	NA	4220 d	5020 d	5500 d	6990 2d
	1.15	NA	4810 d	5720 d	6380 d	8190 2d	NA	4430 d	5220 d	5750 d	7520 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

SBP90.1

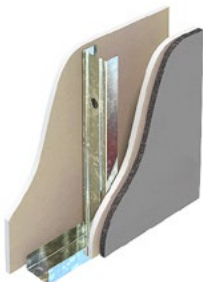
FIRE RESISTANCE LEVEL

NLB –/90/90*

LB 60/60/60 ACR 20%

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: Refer to table
Framing: Steel studs
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Studs @ 600 mm ctrs (BMT 0.5 mm / 0.7 mm)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	108.5, 121	120.5, 133	136.5, 149
			STUD SIZE mm	64	76	92
			INSULATION*	R _w (R _w +C _{tr})		
SBP90.1A	1x16 mm FIRESTOP	1x16 mm FIRESTOP + 1x12.5 mm PEARMAROCK	KI 50G11	51(40)	52(42)	53(44)
			KI 75G11	-	53(43)	54(45)
			KI 90G11	-	-	54(45)
SBP90.1B	1x16 mm FIRESTOP + 1x12.5 mm PEARMAROCK	1x16 mm FIRESTOP + 1x12.5 mm PEARMAROCK	KI 50G11	52(44)	53(45)	54(46)
			KI 75G11	-	54(46)	55(47)
			KI 90G11	-	-	55(47)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

In wet areas use MULTISTOP ONE in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	STUD SIZE mm	51	64	76	92	150	51	64	76	92	150
BASE METAL THICKNESS mm	0.50	3400 f	4100 f	NA	NA	NA	3390 d	3910 d	NA	NA	NA
	0.55	NA	NA	4700 d	5560 d	NA	NA	NA	4300 d	5180 d	NA
	0.75	NA	4500 f	5200 f	6100 f	7750 2d	NA	4350 d	5260 d	5710 d	7190 2d
	1.15	NA	4950 d	5800 f	6580 d	8300 2d	NA	4520 d	5420 d	5930 d	7630 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), f – fire height

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

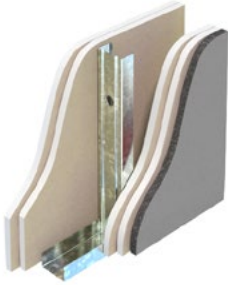
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PERMAROCK® – LINED BOTH SIDES

SBP120.1

FIRE RESISTANCE LEVEL
 NLB **-/120/120**
 LB **90/90/90**
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** Refer to table
- Framing:** Steel studs
- Insulation:** Refer to table
- Side 2:** Refer to table

ACOUSTIC RATINGS BASIS: SLR-FB-S-S-01

Studs @ 600 mm ctrs (BMT 0.5 mm / 0.7 mm)

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	128.5, 141	140.5, 153	156.5, 169
			STUD SIZE mm	64	76	92
			INSULATION*	R _w (R _w +C _{tr})		
SBF120.1A	2x13 mm FIRESTOP	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	Nil	46(37)	47(39)	48(41)
			KI 50G11	53(44)	54(46)	55(48)
			KI 75G11	-	55(47)	56(49)
			KI 90G11	-	-	56(49)
SBF120.1B	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	Nil	48(42)	49(43)	50(44)
			KI 50G11	54(48)	55(49)	56(50)
			KI 75G11	-	56(50)	57(51)
			KI 90G11	-	-	57(51)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density
 In wet areas use MULTISTOP ONE or MULTISTOP ONE HI in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	400					600					
	51	64	76	92	150	51	64	76	92	150	
BASE METAL THICKNESS mm	0.50	2600 f	3100 f	NA	NA	NA	2600 f	3100 f	NA	NA	NA
	0.55	NA	NA	3700 f	4600 f	NA	NA	NA	3700 f	4600 f	NA
	0.75	NA	3500 f	4000 f	4700 f	6700 f	NA	3500 f	4000 f	4700 f	6700 f
	1.15	NA	3900 f	4500 f	5200 f	7700 f	NA	3900 f	4500 f	5200 f	7520 2d

Height Limiting Factor: 2d – deflection (2 rows noggings), f – fire height

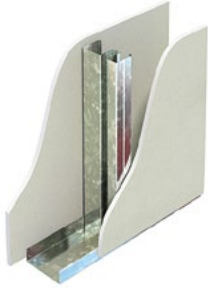
*Refer Rondo for maximum heights for load bearing walls

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

QUIET STUD®

SQ.1

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x10 mm non-fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x10 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03, SLR-SR-S-QS-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	112
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQ.1A	1x10 mm SHEETROCK ONE	1x10 mm SHEETROCK ONE	Nil	31(23)
			KI 50G11	37(29)
			KI 75G11	38(30)
			KI 90G11	38(30)
SQ.1H	1x10 mm SHEETROCK PLUS	1x10 mm SHEETROCK PLUS	Nil	39(31)
			KI 50G11	46(36)
			KI 75G11	47(37)
			KI 90G11	47(37)
SQ.1I	10 mm SHEETROCK ONE	1x10 mm SHEETROCK PLUS	Nil	32(24)
			KI 50G11	38(30)
			KI 75G11	39(31)
			KI 90G11	39(31)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

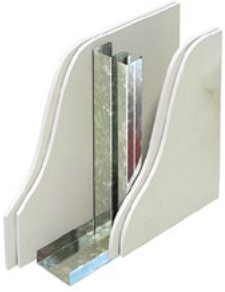
STUD SPACING mm	STUD SIZE mm	450	600
BASE METAL THICKNESS mm	0.55	4020	3700
	0.75	4780	4430

Source: Rondo Building Systems

QUIET STUD®

SQ.2

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2x10 mm non-fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x10 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03, SLR-SR-S-QS-01

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	132
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQ.2A	2x10 mm SHEETROCK ONE	2x10 mm SHEETROCK ONE	Nil	41(32)
			KI 50G11	49(40)
			KI 75G11	50(41)
			KI 90G11	50(41)
SQ.2H	2x10 mm SHEETROCK PLUS	2x10 mm SHEETROCK PLUS	Nil	47(39)
			KI 50G11	53(45)
			KI 75G11	54(46)
			KI 90G11	55(47)
SQ.2I	2x10 mm SHEETROCK ONE	2x10 mm SHEETROCK PLUS	Nil	42(33)
			KI 50G11	50(41)
			KI 75G11	51(42)
			KI 90G11	51(42)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		450	600
STUD SIZE mm		92	
BASE METAL THICKNESS mm	0.55	4020	3700
	0.75	4780	4430

Source: Rondo Building Systems

QUIET STUD®

SQ.3

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm non-fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	118
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ.3A	1x13 mm SHEETROCK ONE	1x13 mm SHEETROCK ONE	Nil	39(31)
			KI 50G11	46(38)
			KI 75G11	48(39)
			KI 90G11	48(39)
SQ.3B	1x13 mm WETSTOP	1x13 mm WETSTOP	Nil	40(32)
			KI 50G11	47(37)
			KI 75G11	48(38)
			KI 90G11	48(38)
SQ.3E	1x13 mm SHEETROCK ONE	1x13 mm WETSTOP	Nil	40(32)
			KI 50G11	46(36)
			KI 75G11	48(38)
			KI 90G11	48(37)
SQ.3K	1x13 mm SHEETROCK ONE	1x13 mm IMPACTSTOP	Nil	42(34)
			KI 50G11	49(39)
			KI 75G11	50(40)
			KI 90G11	50(40)
SQ.3L	1x13 mm WETSTOP	1x13 mm IMPACTSTOP	Nil	42(34)
			KI 50G11	49(39)
			KI 75G11	50(40)
			KI 90G11	50(40)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		92	
BASE METAL THICKNESS mm	0.55	4410	4130
	0.75	5330	5020

Source: Rondo Building Systems

QUIET STUD®

SQ.4

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm non-fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	131
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQ.4A	1x13 mm SHEETROCK ONE	2x13 mm SHEETROCK ONE	Nil	45(37)
			KI 50G11	50(42)
			KI 75G11	52(43)
			KI 90G11	53(44)
SQ.4B	1x13 mm WETSTOP	2x13 mm WETSTOP	Nil	46(37)
			KI 50G11	52(44)
			KI 75G11	53(45)
			KI 90G11	54(46)
SQ.4E	1x13 mm SHEETROCK ONE	2x13 mm WETSTOP	Nil	46(38)
			KI 50G11	51(43)
			KI 75G11	52(44)
			KI 90G11	53(45)
SQ.4K	1x13 mm SHEETROCK ONE	2x13 mm IMPACTSTOP	Nil	47(38)
			KI 50G11	53(45)
			KI 75G11	54(46)
			KI 90G11	55(47)
SQ.4L	1x13 mm WETSTOP	2x13 mm IMPACTSTOP	Nil	47(39)
			KI 50G11	53(46)
			KI 75G11	54(47)
			KI 90G11	55(48)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

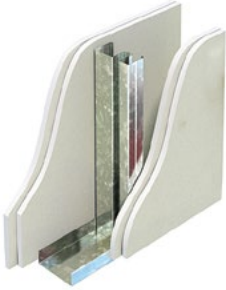
STUD SPACING mm	STUD SIZE mm	450	600
		92	
BASE METAL THICKNESS mm	0.55	4410	4130
	0.75	5330	5020

Source: Rondo Building Systems

QUIET STUD®

SQ.5

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2x13 mm non-fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQ.5A	2x13 mm SHEETROCK ONE	2x13 mm SHEETROCK ONE	Nil	45(38)
			KI 50G11	53(46)
			KI 75G11	54(47)
			KI 90G11	55(48)
SQ.5B	2x13 mm WETSTOP	2x13 mm WETSTOP	Nil	46(39)
			KI 50G11	54(47)
			KI 75G11	55(48)
			KI 90G11	56(49)
SQ.5E	2x13 mm SHEETROCK ONE	2x13 mm WETSTOP	Nil	46(38)
			KI 50G11	53(47)
			KI 75G11	54(48)
			KI 90G11	55(49)
SQ.5K	2x13 mm SHEETROCK ONE	2x13 mm IMPACTSTOP	Nil	49(41)
			KI 50G11	54(48)
			KI 75G11	55(50)
			KI 90G11	56(51)
SQ.5L	2x13 mm WETSTOP	2x13 mm IMPACTSTOP	Nil	48(40)
			KI 50G11	54(49)
			KI 75G11	56(50)
			KI 90G11	57(51)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		92	
BASE METAL THICKNESS mm	0.55	4410	4130
	0.75	5330	5020

Source: Rondo Building Systems

SQ30.1

FIRE RESISTANCE LEVEL
 NLB -/30/30
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Steel studs
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	118
			STUD SIZE mm	92
			INSULATION	$R_w(R_w+C_{tr})$
SQ30.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP	Nil	42(31)
SQ30.1B	1x13 mm MULTISTOP ONE	1x13 mm MULTISTOP ONE		43(35)
SQ30.1C	1x13mm FIRESTOP	1x13mm MULTISTOP ONE		42(35)
SQ30.1D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP		43(35)
SQ30.1E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP		42(35)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		92	
BASE METAL THICKNESS mm	0.55	4410	4130
	0.75	5330	5020

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

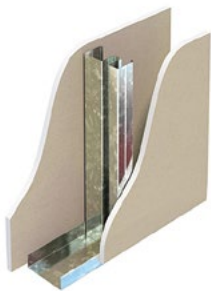
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 Blue text indicates systems and products suitable for wet areas.

QUIET STUD®

SQ60.1

FIRE RESISTANCE LEVEL
 NLB -/60/60*
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	118
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ60.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP	KI 50G11	48(39)
			KI 75G11	49(40)
			KI 90G11	49(40)
SQ60.1B	1x13 mm MULTISTOP ONE	1x13 mm MULTISTOP ONE	KI 50G11	50(42)
			KI 75G11	51(43)
			KI 90G11	51(43)
SQ60.1C	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE	KI 50G11	49(40)
			KI 75G11	50(41)
			KI 90G11	50(41)
SQ60.1D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP	KI 50G11	50(42)
			KI 75G11	51(43)
			KI 90G11	51(43)
SQ60.1E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP	KI 50G11	49(40)
			KI 75G11	50(41)
			KI 90G11	50(41)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450		600	
	STUD SIZE mm			
	92			
BASE METAL THICKNESS mm	0.55	4410	4130	
	0.75	5330	5020	

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

SQ60.2

FIRE RESISTANCE LEVEL
 NLB -/60/60*
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
 + 1x13 mm non-fire
 resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd
 + 1x13 mm non-fire
 resistant pbd

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ60.2A	1x13 mm FIRESTOP + 1x13 mm SHEETROCK ONE	1x13 mm FIRESTOP + 1x13 mm SHEETROCK ONE	KI 90G11	56(50)
			KI 90G11	57(50)
SQ60.2B	1x13 mm MULTISTOP ONE + 1x13 mm WETSTOP	1x13 mm MULTISTOP ONE + 1x13 mm WETSTOP	KI 90G11	57(50)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450		600	
	STUD SIZE mm			
	92			
BASE METAL THICKNESS mm	0.55	4410	4130	
	0.75	5330	5020	

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

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 Blue text indicates systems and products suitable for wet areas.

QUIET STUD®

SQ60.3

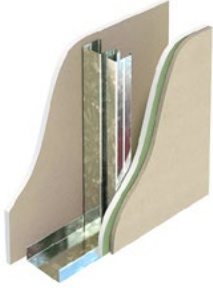
FIRE RESISTANCE LEVEL

NLB -/60/60*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm FIRESTOP
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x13 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	124
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQ60.3B	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	53(46)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450	600	
	STUD SIZE mm		92
BASE METAL THICKNESS mm	0.55	4410	4130
	0.75	5330	5020

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

SQ60.4

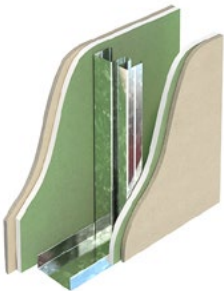
FIRE RESISTANCE LEVEL

NLB -/60/60*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x13 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	130
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQ60.4B	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 75G11	56(50)
			KI 90G11	57(51)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450	600	
	STUD SIZE mm		92
BASE METAL THICKNESS mm	0.55	4410	4130
	0.75	5330	5020

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

QUIET STUD®

SQ60.5

FIRE RESISTANCE LEVEL

NLB -/60/60

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd

Framing: Rondo QUIET STUD

Insulation: Refer to table

Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	131
			STUD SIZE mm	92
			INSULATION	$R_w(R_w+C_{tr})$
SQ60.5A	1x13 mm FIRESTOP	2x13 mm FIRESTOP	Nil	46(38)
SQ60.5B	1x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	Nil	48(40)
SQ60.5C	1x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	Nil	47(39)
SQ60.5D	1x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	Nil	47(39)
SQ60.5E	1x13 mm FIRESTOP	2x13 mm IMPACTSTOP	Nil	48(40)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450	600
	STUD SIZE mm	
	92	
BASE METAL THICKNESS mm	0.55	4410
	0.75	5330
		4130
		5020

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

SQ60.6

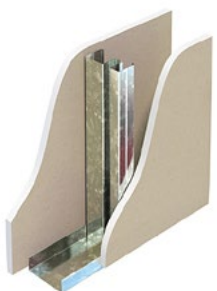
FIRE RESISTANCE LEVEL

NLB -/60/60

LB 60/60/60 ACR 20%

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x16 mm fire resistant pbd

Framing: Rondo QUIET STUD

Insulation: Refer to table

Side 2: 1x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	124
			STUD SIZE mm	92
			INSULATION	$R_w(R_w+C_{tr})$
SQ60.6A	1x16 mm FIRESTOP	1x16 mm FIRESTOP	Nil	43(36)
SQ60.6B	1x16 mm MULTISTOP ONE	1x16 mm MULTISTOP ONE	Nil	43(37)
SQ90.3C	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE	Nil	43(37)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450	600
	STUD SIZE mm	
	92	
BASE METAL THICKNESS mm	0.55	4580
	0.75	5580
		4300
		5250

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

QUIET STUD®

SQ90.1

FIRE RESISTANCE LEVEL

NLB -/90/90*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	131
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ90.1A	1x13 mm FIRESTOP	2x13 mm FIRESTOP	KI 50G11	53(46)
			KI 75G11	54(47)
			KI 90G11	55(48)
SQ90.1B	1x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	KI 50G11	54(47)
			KI 75G11	55(48)
			KI 90G11	56(49)
SQ90.1C	1x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	KI 50G11	53(46)
			KI 75G11	54(47)
			KI 90G11	56(49)
SQ90.1D	1x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	KI 50G11	54(47)
			KI 75G11	55(48)
			KI 90G11	56(49)
SQ90.1E	1x13 mm FIRESTOP	2x13 mm IMPACTSTOP	KI 50G11	53(46)
			KI 75G11	54(47)
			KI 90G11	56(49)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	BASE METAL THICKNESS mm	
		0.55	0.75
450	92	4410	4130
600	92	5330	5020

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

SQ90.2

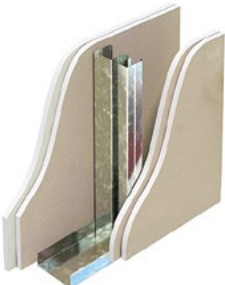
FIRE RESISTANCE LEVEL

NLB -/90/90*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm fire resistant pbd + 1x13 mm non-fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TE504-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ90.2A	1x13 mm FIRESTOP + 1x13 mm SHEETROCK ONE	2x13 mm FIRESTOP	KI 90G11	56(50)
			KI 90G11	56(50)
SQ90.2B	1x13 mm MULTISTOP ONE + 1x13 mm WETSTOP	2x13 mm MULTISTOP ONE	KI 90G11	56(50)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	BASE METAL THICKNESS mm	
		0.55	0.75
450	92	4410	4130
600	92	5330	5020

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

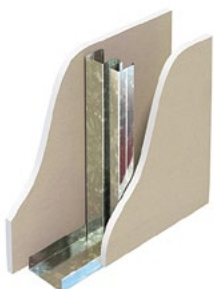
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 Blue text indicates systems and products suitable for wet areas.

QUIET STUD®

SQ90.3

FIRE RESISTANCE LEVEL
 NLB **-/90/90+**
 LB **60/60/60** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x16 mm fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	124
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ90.3A	1x16 mm FIRESTOP	1x16 mm FIRESTOP	KI 50G11	49(40)
			KI 75G11	50(43)
			KI 90G11	50(43)
SQ90.3B	1x16 mm MULTISTOP ONE	1x16 mm MULTISTOP ONE	KI 50G11	50(42)
			KI 75G11	51(43)
			KI 90G11	51(43)
SQ90.3C	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE	KI 50G11	49(42)
			KI 75G11	50(43)
			KI 90G11	50(43)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density
 + Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		BASE METAL THICKNESS mm	0.55
	0.75	5580	5250

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

SQ90.4

FIRE RESISTANCE LEVEL
 NLB **-/90/90+**
 LB **60/60/60** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x16 mm fire resistant pbd + 1x13 mm non-fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x16 mm fire resistant + 1x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	150
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ90.4A	1x16 mm FIRESTOP + 1x13 mm SHEETROCK ONE	1x16 mm FIRESTOP + 1x13 mm SHEETROCK ONE	KI 75G11	55(50)
SQ90.4B	1x16 mm MULTISTOP ONE + 1x13 mm WETSTOP	1x16 mm MULTISTOP ONE + 1x13 mm WETSTOP	KI 75G11	55(50)

* KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 + Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		BASE METAL THICKNESS mm	0.55
	0.75	5580	5250

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

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 Blue text indicates systems and products suitable for wet areas.

QUIET STUD®

SQ90.5

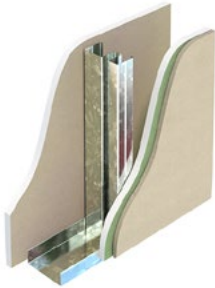
FIRE RESISTANCE LEVEL

NLB -/90/90⁺

LB 60/60/60 ACR 20%

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm FIRESTOP
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x16 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	130
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ90.5B	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	54(48)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 + Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450		600	
	STUD SIZE mm			
BASE METAL THICKNESS mm	0.55	4580	4300	
	0.75	5580	5250	

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

SQ90.6

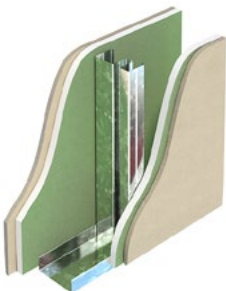
FIRE RESISTANCE LEVEL

NLB -/90/90⁺

LB 60/60/60 ACR 20%

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x16 mm MULTISTOP ONE
 + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	136
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ90.6B	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	54(50)
			KI 75G11	56(51)
			KI 90G11	57(52)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density
 + Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450		600	
	STUD SIZE mm			
BASE METAL THICKNESS mm	0.55	4580	4300	
	0.75	5580	5250	

Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

QUIET STUD®

SQ120.1

FIRE RESISTANCE LEVEL
 NLB -/120/120
 LB 90/90/90
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 2x13 mm fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ120.1A	2x13 mm FIRESTOP	2x13 mm FIRESTOP	Nil	47(40)
			KI 50G11	54(49)
			KI 75G11	55(50)
			KI 90G11	57(52)
SQ120.1B	2x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	Nil	49(41)
			KI 50G11	55(51)
			KI 75G11	56(52)
			KI 90G11	57(53)
SQ120.1C	2x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	Nil	48(41)
			KI 50G11	55(50)
			KI 75G11	56(51)
			KI 90G11	57(52)
SQ120.1D	2x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	Nil	49(41)
			KI 50G11	55(51)
			KI 75G11	56(52)
			KI 90G11	57(53)
SQ120.1E	2x13 mm FIRESTOP	2x13 mm IMPACTSTOP	Nil	48(41)
			KI 50G11	55(50)
			KI 75G11	56(51)
			KI 90G11	57(52)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		4410	4130
BASE METAL THICKNESS mm	0.55	4410	4130
	0.75	5330	5020

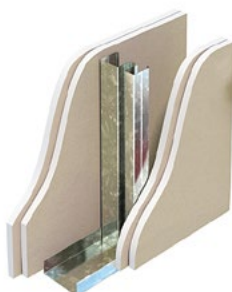
Source: Rondo Building Systems

*Refer Rondo for maximum heights for load bearing walls

SQ120.2

FIRE RESISTANCE LEVEL
 NLB -/120/120
 LB 120/120/120 ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 2x16 mm fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: TE405-20S03

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	156
			STUD SIZE mm	92
			INSULATION*	R _w (R _w +C _{tr})
SQ120.2A	2x16 mm FIRESTOP	2x16 mm FIRESTOP	Nil	49(41)
			KI 50G11	57(50)
			KI 75G11	58(51)
			KI 90G11	59(52)
SQ120.2B	2x16 mm MULTISTOP ONE	2x16 mm MULTISTOP ONE	Nil	50(42)
			KI 50G11	57(52)
			KI 75G11	58(53)
			KI 90G11	59(54)
SQ120.2C	2x16 mm FIRESTOP	2x16 mm MULTISTOP ONE	Nil	49(41)
			KI 50G11	57(51)
			KI 75G11	58(52)
			KI 90G11	59(53)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		4580	4300
BASE METAL THICKNESS mm	0.55	4580	4300
	0.75	5580	5250

Source: Rondo Building Systems

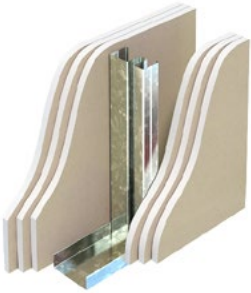
*Refer Rondo for maximum heights for load bearing walls with ACR 20%.

QUIET STUD®

SQ180.3

FIRE RESISTANCE LEVEL
 NLB -/180/180
 LB 120/120/120
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 3x16 mm fire resistant pbd
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 3x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-15F01

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	188
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQ180.3A	3x16 mm FIRESTOP	3x16 mm FIRESTOP	Nil	55(47)
			KI 50G11	61(55)
			KI 75G11	61(55)
			KI 90G11	62(56)
SQ180.3B	3x16 mm MULTISTOP ONE	3x16 mm MULTISTOP ONE	Nil	56(48)
			KI 50G11	62(56)
			KI 75G11	62(56)
			KI 90G11	63(57)
SQ180.3C	3x16 mm FIRESTOP	3x16 mm MULTISTOP ONE	Nil	55(47)
			KI 50G11	61(55)
			KI 75G11	61(55)
			KI 90G11	62(56)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*		SERVICEABILITY PRESSURE: 0.25 kPa	
STUD SPACING mm		450	600
STUD SIZE mm		92	
BASE METAL THICKNESS mm	0.55	4580	4300
	0.75	5100	4600

Source: Rondo Building Systems

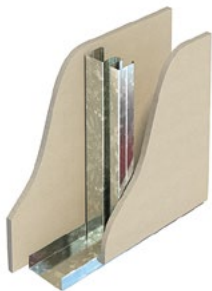
*Refer Rondo for maximum heights for load bearing walls.

FIBEROCK® AQUA-TOUGH™ – QUIET STUD

SQF30.1

FIRE RESISTANCE LEVEL
NLB -/30/30
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK
AQUA-TOUGH
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x13 mm FIBEROCK
AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-QS-01

Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	118
			STUD SIZE mm	92
SQF30.1A	1x13 mm FIBEROCK AQUA-TOUGH	1x13 mm FIBEROCK AQUA-TOUGH	INSULATION*	$R_w(R_w+C_{tr})$
			Nil	40(33)
			KI 50G11	48(41)
			KI 75G11	50(43)
KI 90G11	51(44)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

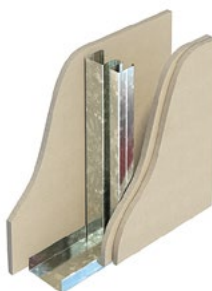
BASE METAL THICKNESS mm	STUD SPACING mm		STUD SIZE mm	
	450	600	450	600
0.55	4410	4130	92	4130
0.75	5330	5020	92	5020

Source: Rondo Building Systems

SQF30.2

FIRE RESISTANCE LEVEL
NLB -/30/30
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK
AQUA-TOUGH
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x13 mm FIBEROCK
AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-QS-01

Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	131
			STUD SIZE mm	92
SQF30.2A	1x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	INSULATION*	$R_w(R_w+C_{tr})$
			Nil	44(38)
			KI 50G11	54(47)
			KI 75G11	55(48)
KI 90G11	56(49)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	STUD SPACING mm		STUD SIZE mm	
	450	600	450	600
0.55	4410	4130	92	4130
0.75	5330	5020	92	5020

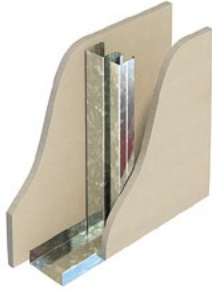
Source: Rondo Building Systems

FIBEROCK® AQUA-TOUGH™ – QUIET STUD

SQF60.1

FIRE RESISTANCE LEVEL
NLB –/60/60
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x16 mm FIBEROCK
AQUA-TOUGH
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 1x16 mm FIBEROCK
AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-QS-01

Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	124
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQF60.1A	1x16 mm FIBEROCK AQUA-TOUGH	1x16 mm FIBEROCK AQUA-TOUGH	Nil	43(37)
			KI 50G11	52(45)
			KI 75G11	53(46)
			KI 90G11	54(47)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

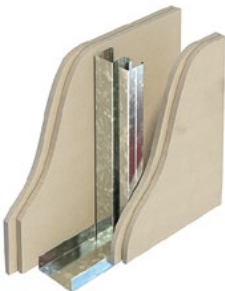
STUD SPACING mm	450	600	
	STUD SIZE mm		
BASE METAL THICKNESS mm	0.55	4580	4300
	0.75	5580	5250
		92	

Source: Rondo Building Systems

SQF90.1

FIRE RESISTANCE LEVEL
NLB –/90/90
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 2x13 mm FIBEROCK
AQUA-TOUGH
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x13 mm FIBEROCK
AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-QS-01

Based on studs @ 600 mm ctrs
and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQF90.1A	2x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	50(43)
			KI 50G11	57(49)
			KI 75G11	59(51)
			KI 90G11	60(52)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450	600	
	STUD SIZE mm		
BASE METAL THICKNESS mm	0.55	4410	4130
	0.75	5330	5020
		92	

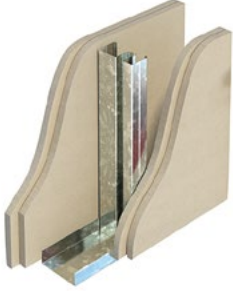
Source: Rondo Building Systems

FIBEROCK® AQUA-TOUGH™ – QUIET STUD

SQF120.1

FIRE RESISTANCE LEVEL
NLB -/120/120
 FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 2x16 mm
 FIBEROCK AQUA-TOUGH
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2x16 mm
 FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-QS-01

Based on studs @ 600 mm ctrs
 and thinnest available stud gauge

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	156
			STUD SIZE mm	92
SQF120.1A	2x16 mm FIBEROCK AQUA-TOUGH	2x16 mm FIBEROCK AQUA-TOUGH	INSULATION*	R _w (R _w +C _{tr})
			Nil	52(44)
			KI 50G11	58(54)
			KI 75G11	60(56)
KI 90G11	61(57)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

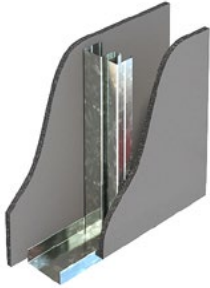
STUD SPACING mm	450		600	
	STUD SIZE mm			
BASE METAL THICKNESS mm	0.55	4580	4300	
	0.75	5580	5250	

Source: Rondo Building Systems

PERMAROCK® – QUIET STUD

SQP.1

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: Non-fire resistant lining
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: Non-fire resistant lining

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Quietstuds
@ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	117.5
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQP.1A	1x12.5 mm PERMAROCK	1x12.5 mm PERMAROCK	Nil	43(34)
			KI 50G11	50(41)
			KI 75G11	51(42)
			KI 90G11	51(42)
SQP.1B	1x12.5 mm PERMAROCK	1x13 mm SHEETROCK ONE	Nil	43(33)
			KI 50G11	49(39)
			KI 75G11	50(40)
			KI 90G11	50(40)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

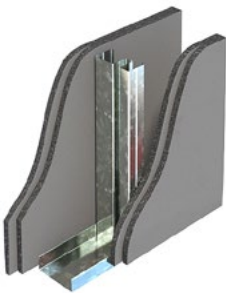
SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		4410	4130
BASE METAL THICKNESS mm	0.55	5330	5020
	0.75		

Source: Rondo Building Systems

SQP.2

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2 x Non-fire resistant lining
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: 2 x Non-fire resistant lining

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Quietstuds
@ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	143
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQP.2A	2x12.5 mm PERMAROCK	2x12.5 mm PERMAROCK	Nil	49(44)
			KI 50G11	55(50)
			KI 75G11	56(51)
			KI 90G11	57(52)
SQP.2B	2x12.5 mm PERMAROCK	2x13 mm SHEETROCK ONE	Nil	47(41)
			KI 50G11	53(47)
			KI 75G11	54(48)
			KI 90G11	55(49)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	STUD SIZE mm	450	600
		4410	4130
BASE METAL THICKNESS mm	0.55	5330	5020
	0.75		

Source: Rondo Building Systems

PERMAROCK® – QUIET STUD

SQP60.1

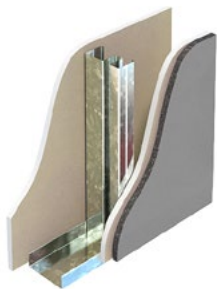
FIRE RESISTANCE LEVEL

NLB –/60/60*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: Refer to table
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Quietstuds
@ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	130.5, 143
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQP60.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	53(45)
			KI 75G11	54(46)
			KI 90G11	55(47)
SQP60.1B	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	54(48)
			KI 75G11	55(49)
			KI 90G11	56(50)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL
 In wet areas use MULTISTOP ONE or MULTISTOP ONE HI in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450		600		
	STUD SIZE mm				
		92			
BASE METAL THICKNESS mm	0.55	4410	4130		
	0.75	5330	5020		

Source: Rondo Building Systems

* Refer Rondo for maximum heights for load bearing walls

SQP90.1

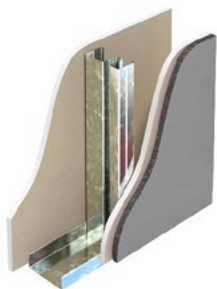
FIRE RESISTANCE LEVEL

NLB –/90/90*

LB 60/60/60 ACR 20%

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: Refer to table
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Quietstuds
@ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	136.5, 149
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQP90.1A	1x16 mm FIRESTOP	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	55(47)
			KI 75G11	56(48)
			KI 90G11	57(49)
SQP90.1B	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	55(49)
			KI 75G11	56(50)
			KI 90G11	57(51)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL
 In wet areas use MULTISTOP ONE in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450		600		
	STUD SIZE mm				
		92			
BASE METAL THICKNESS mm	0.55	4580	4300		
	0.75	5580	5250		

Source: Rondo Building Systems

* Refer Rondo for maximum heights for load bearing walls within ACR 20%.

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

PERMAROCK® – QUIET STUD

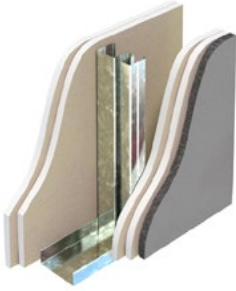
SQP120.1**FIRE RESISTANCE LEVEL**

NLB –/120/120

LB 90/90/90

FROM BOTH SIDES

FRL Basis: FC16109

**SYSTEM DESCRIPTION**

Side 1: Refer to table
Framing: Rondo QUIET STUD
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS RT&A TK778-16F02Quietstuds
@ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	156.5, 169
			STUD SIZE mm	92
			INSULATION*	$R_w(R_w+C_{tr})$
SQP120.1A	2x13 mm FIRESTOP	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	Nil	50(44)
			KI 50G11	57(51)
			KI 75G11	58(52)
			KI 90G11	59(53)
SQP120.1B	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	Nil	51(47)
			KI 50G11	57(53)
			KI 75G11	58(54)
			KI 90G11	59(55)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

In wet areas use MULTISTOP ONE or MULTISTOP ONE HI in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	450		600	
	STUD SIZE mm			
BASE METAL THICKNESS mm	92			
	0.55	0.75	4410	4130
			5330	5020

Source: Rondo Building Systems

* Refer Rondo for maximum heights for load bearing walls.

STAGGERED STUD

SS.1

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x10 mm non-fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x10 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S01(R9), SLR-SR-S-SS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	112	170
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS.1A	1x10 mm SHEETROCK ONE	1x10 mm SHEETROCK ONE	Nil	29(20)	33(24)
			KI 50G11	35(27)	39(31)
			KI 75G11	36(27)	40(31)
			KI 90G11	37(29)	41(33)
SS.1H	1x10 mm SHEETROCK PLUS	1x10 mm SHEETROCK PLUS	Nil	39(32)	41(33)
			KI 50G11	46(36)	49(40)
			KI 75G11	47(37)	50(41)
			KI 90G11	47(37)	50(41)
SS.1I	1x10 mm SHEETROCK ONE	1x10 mm SHEETROCK PLUS	Nil	34(25)	38(29)
			KI 50G11	40(31)	44(36)
			KI 75G11	41(32)	45(36)
			KI 90G11	42(33)	46(38)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	51	64	76	92	
STUD SIZE mm					
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

STAGGERED STUD

SS.2

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2x10 mm non-fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 2x10 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S01(R9), SLR-SR-S-SS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	132	190
			TRACK SIZE mm	92	150
			INSULATION*	$R_w(R_w+C_{tr})$	
SS.2A	2x10 mm SHEETROCK ONE	2x10 mm SHEETROCK ONE	Nil	38(29)	41(32)
			KI 50G11	46(36)	49(39)
			KI 75G11	47(36)	50(39)
			KI 90G11	48(38)	51(41)
SS.2H	2x10 mm SHEETROCK PLUS	2x10 mm SHEETROCK PLUS	Nil	46(38)	48(39)
			KI 50G11	55(46)	57(50)
			KI 75G11	56(47)	58(51)
			KI 90G11	57(48)	59(52)
SS.2I	2x10 mm SHEETROCK ONE	2x10 mm SHEETROCK PLUS	Nil	42(32)	46(35)
			KI 50G11	51(40)	53(43)
			KI 75G11	52(41)	55(44)
			KI 90G11	53(43)	56(46)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	51	64	76	92	
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

STAGGERED STUD

SS.3

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm non-fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	118	176
			TRACK SIZE mm	92	150
			INSULATION*	$R_w(R_w+C_{tr})$	
SS.3A	1x13 mm SHEETROCK ONE	1x13 mm SHEETROCK ONE	Nil	38(32)	40(33)
			KI 50G11	46(36)	48(39)
			KI 75G11	47(37)	49(40)
			KI 90G11	47(37)	50(40)
SS.3B	1x13 mm WETSTOP	1x13 mm WETSTOP	Nil	39(33)	41(34)
			KI 50G11	47(37)	49(40)
			KI 75G11	48(38)	50(41)
			KI 90G11	48(38)	51(41)
SS.3E	1x13 mm SHEETROCK ONE	1x13 mm WETSTOP	Nil	39(33)	41(34)
			KI 50G11	46(37)	49(39)
			KI 75G11	47(38)	50(40)
			KI 90G11	47(38)	50(40)
SS.3K	1x13 mm SHEETROCK ONE	1x13 mm IMPACTSTOP	Nil	40(34)	42(35)
			KI 50G11	48(38)	50(43)
			KI 75G11	49(39)	51(44)
			KI 90G11	49(40)	52(44)
SS.3L	1x13 mm WETSTOP	1x13 mm IMPACTSTOP	Nil	41(35)	43(37)
			KI 50G11	48(39)	51(44)
			KI 75G11	49(40)	52(45)
			KI 90G11	49(41)	52(45)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

STAGGERED STUD

SS.4

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm non-fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 2x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	131	189
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS.4A	1x13 mm SHEETROCK ONE	2x13 mm SHEETROCK ONE	Nil	42(35)	44(36)
			KI 50G11	50(40)	53(44)
			KI 75G11	51(41)	54(45)
			KI 90G11	52(42)	55(46)
SS.4B	1x13 mm WETSTOP	2x13 mm WETSTOP	Nil	43(35)	45(37)
			KI 50G11	51(42)	54(46)
			KI 75G11	52(43)	55(47)
			KI 90G11	54(44)	56(48)
SS.4E	1x13 mm SHEETROCK ONE	2x13 mm WETSTOP	Nil	43(36)	45(36)
			KI 50G11	51(41)	53(45)
			KI 75G11	52(42)	54(46)
			KI 90G11	53(43)	56(47)
SS.4K	1x13 mm SHEETROCK ONE	2x13 mm IMPACTSTOP	Nil	44(36)	46(38)
			KI 50G11	52(43)	55(47)
			KI 75G11	54(44)	56(48)
			KI 90G11	55(46)	57(49)
SS.4L	1x13 mm WETSTOP	2x13 mm IMPACTSTOP	Nil	44(37)	47(38)
			KI 50G11	53(44)	55(47)
			KI 75G11	54(45)	56(48)
			KI 90G11	55(46)	57(50)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	51	64	76	92	
STUD SIZE mm					
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

STAGGERED STUD

SS.5

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2x13 mm non-fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 2x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144	202
			TRACK SIZE	92	150
			INSULATION*	$R_w(R_w+C_{tr})$	
SS.5A	2x13 mm SHEETROCK ONE	2x13 mm SHEETROCK ONE	Nil	45(39)	47(40)
			KI 50G11	54(46)	57(50)
			KI 75G11	55(47)	58(51)
			KI 90G11	56(48)	59(52)
SS.5B	2x13 mm WETSTOP	2x13 mm WETSTOP	Nil	46(40)	49(41)
			KI 50G11	55(47)	58(51)
			KI 75G11	57(49)	59(52)
			KI 90G11	58(50)	60(53)
SS.5E	2x13 mm SHEETROCK ONE	2x13 mm WETSTOP	Nil	46(39)	48(41)
			KI 50G11	55(47)	57(50)
			KI 75G11	56(48)	58(52)
			KI 90G11	57(49)	59(53)
SS.5K	2x13 mm SHEETROCK ONE	2x13 mm IMPACTSTOP	Nil	47(41)	50(42)
			KI 50G11	56(49)	58(52)
			KI 75G11	57(50)	59(53)
			KI 90G11	58(51)	60(54)
SS.5L	2x13 mm WETSTOP	2x13 mm IMPACTSTOP	Nil	48(41)	50(43)
			KI 50G11	57(49)	58(53)
			KI 75G11	58(50)	60(54)
			KI 90G11	59(52)	61(55)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

STAGGERED STUD

SS30.1

FIRE RESISTANCE LEVEL
NLB **-/30/30**
FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	118	176
			TRACK SIZE	92	150
			INSULATION	$R_w(R_w+C_{tr})$	
SS30.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP	Nil	40(35)	42(35)
SS30.1B	1x13 mm MULTISTOP ONE	1x13 mm MULTISTOP ONE		42(36)	44(37)
SS30.1C	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE		41(36)	43(36)
SS30.1D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP		42(36)	44(37)
SS30.1E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP		41(36)	43(36)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	51	64	76	92	
STUD SIZE mm	51	64	76	92	
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SS30.2

FIRE RESISTANCE LEVEL
NLB **-/30/30**
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	130	188
			TRACK SIZE	92	150
			INSULATION	$R_w(R_w+C_{tr})$	
SS30.2B	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	Nil	47(40)	40(42)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	51	64	76	92	
STUD SIZE mm	51	64	76	92	
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

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Blue text indicates systems and products suitable for wet areas.

STAGGERED STUD

SS60.1

FIRE RESISTANCE LEVEL
NLB **-/60/60***
FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	118	176
			TRACK SIZE	92	150
			INSULATION*	$R_w(R_w+C_{tr})$	
SS60.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP	KI 50G11	48(39)	50(42)
			KI 75G11	49(40)	51(44)
			KI 90G11	49(40)	52(44)
SS60.1B	1x13 mm MULTISTOP ONE	1x13 mm MULTISTOP ONE	KI 50G11	49(41)	52(44)
			KI 75G11	50(42)	53(45)
			KI 90G11	51(42)	53(46)
SS60.1C	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE	KI 50G11	49(40)	51(43)
			KI 75G11	50(41)	52(45)
			KI 90G11	50(41)	52(45)
SS60.1D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP	KI 50G11	49(41)	52(44)
			KI 75G11	50(42)	53(45)
			KI 90G11	51(42)	53(46)
SS60.1E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP	KI 50G11	49(40)	51(43)
			KI 75G11	50(41)	52(45)
			KI 90G11	50(41)	52(45)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SS60.2

FIRE RESISTANCE LEVEL
NLB **-/60/60***
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd + 1x13 mm non-fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd + 1x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144	202
			TRACK SIZE	92	150
			INSULATION*	$R_w(R_w+C_{tr})$	
SS60.2A	1x13 mm FIRESTOP + 1x13 mm SHEETROCK ONE	1x13 mm FIRESTOP + 1x13 mm SHEETROCK ONE	KI 50G11	-	57(51)
			KI 90G11	57(50)	-
SS60.2B	1x13 mm MULTISTOP ONE + 1x13 mm WETSTOP	1x13 mm MULTISTOP ONE + 1x13 mm WETSTOP	KI 50G11	-	57(51)
			KI 90G11	57(50)	-

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

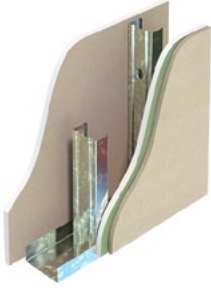
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STAGGERED STUD

SS60.3

FIRE RESISTANCE LEVEL
NLB **-/60/60⁺**
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIRESTOP
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x13 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	124	182
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS60.3B	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	53(44)	-

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SS60.4

FIRE RESISTANCE LEVEL
NLB **-/60/60⁺**
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	130	188
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS60.4B	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	56(48)	58(52)
			KI 75G11	57(49)	59(53)
			KI 90G11	58(50)	60(54)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

STAGGERED STUD

SS60.5

FIRE RESISTANCE LEVEL
NLB -/60/60
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm fire resistant pbd
- Framing:** Staggered steel studs
- Insulation:** Refer to table
- Side 2:** 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9) Based on studs @ 600 mm ctrs					
SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	131	189
			TRACK SIZE	92	150
			INSULATION	R _w (R _w +C _{tr})	
SS60.5A	1x13 mm FIRESTOP	2x13 mm FIRESTOP	Nil	43(36)	46(38)
SS60.5B	1x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE		45(38)	48(39)
SS60.5C	1x13 mm FIRESTOP	2x13 mm MULTISTOP ONE		44(37)	47(39)
SS60.5D	1x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP		45(38)	48(39)
SS60.5E	1x13 mm FIRESTOP	2x13 mm IMPACTSTOP		44(37)	47(39)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS			SERVICEABILITY PRESSURE: 0.25 kPa			
STUD SPACING mm		600				
STUD SIZE mm		51	64	76	92	
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA	
	0.55	NA	NA	2610 s	2740 s	
	0.75	NA	2830 s	3000 s	3190 s	
	1.15	NA	3510 s	3600 s	3750 s	

Height Limiting Factor: d – deflection, s – permissible strength

SS60.6

FIRE RESISTANCE LEVEL
NLB -/60/60
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm fire resistant pbd
- Framing:** Staggered steel studs
- Insulation:** Refer to table
- Side 2:** 1x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9) Based on studs @ 600 mm ctrs					
SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	124	182
			TRACK SIZE	92	150
			INSULATION	R _w (R _w +C _{tr})	
SS60.5A	1x16 mm FIRESTOP	1x16 mm FIRESTOP	Nil	43(36)	46(39)
SS60.5B	1x16 mm MULTISTOP ONE	1x16 mm MULTISTOP ONE		44(38)	46(40)
SS60.5C	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE		44(38)	47(40)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS			SERVICEABILITY PRESSURE: 0.25 kPa			
STUD SPACING mm		600				
STUD SIZE mm		51	64	76	92	
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA	
	0.55	NA	NA	2610 s	2740 s	
	0.75	NA	2830 s	3000 s	3190 s	
	1.15	NA	3510 s	3600 s	3750 s	

Height Limiting Factor: d – deflection, s – permissible strength

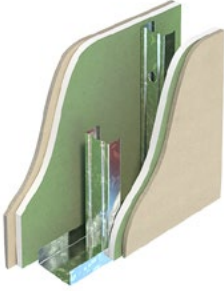
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STAGGERED STUD

SS60.7

FIRE RESISTANCE LEVEL
NLB **-/60/60**
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x16 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x16 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	136	194
			TRACK SIZE	92	150
			INSULATION	R _w (R _w +C _{tr})	
SS60.7B	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	Nil	48(42)	50(43)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SS90.1

FIRE RESISTANCE LEVEL
NLB **-/90/90⁺**
FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	131	189
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS90.1A	1x13 mm FIRESTOP	2x13 mm FIRESTOP	KI 50G11	53(44)	55(47)
			KI 75G11	54(45)	56(48)
			KI 90G11	55(46)	57(49)
SS90.1B	1x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	KI 50G11	54(45)	56(49)
			KI 75G11	55(47)	57(50)
			KI 90G11	56(48)	58(51)
SS90.1C	1x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	KI 50G11	53(45)	55(48)
			KI 75G11	54(46)	56(49)
			KI 90G11	55(47)	58(50)
SS90.1D	1x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	KI 50G11	54(45)	56(49)
			KI 75G11	55(47)	57(50)
			KI 90G11	56(48)	58(51)
SS90.1E	1x13 mm FIRESTOP	2x13 mm IMPACTSTOP	KI 50G11	53(45)	55(48)
			KI 75G11	54(46)	56(49)
			KI 90G11	55(47)	58(50)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
Blue text indicates systems and products suitable for wet areas.

STAGGERED STUD

SS90.2

FIRE RESISTANCE LEVEL
NLB -/90/90*
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm fire resistant pbd + 1x13 mm non-fire resistant pbd
- Framing:** Staggered steel studs
- Insulation:** Refer to table
- Side 2:** 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144	202
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS90.2A	1x13 mm FIRESTOP + 13 mm SHEETROCK ONE	2x13 mm FIRESTOP	KI 50G11	-	58(52)
			KI 75G11	57(50)	-
SS90.2C	1x13 mm MULTISTOP ONE + 1x13 mm WETSTOP	2x13 mm FIRESTOP	KI 50G11	-	59(53)
			KI 75G11	58(50)	-

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

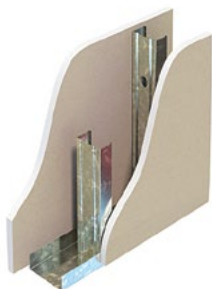
STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SS90.3

FIRE RESISTANCE LEVEL
NLB -/90/90*
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm fire resistant pbd
- Framing:** Staggered steel studs
- Insulation:** Refer to table
- Side 2:** 1x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	124	182
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS90.3A	1x16 mm FIRESTOP	1x16 mm FIRESTOP	KI 50G11	51(43)	53(46)
			KI 75G11	52(44)	55(47)
			KI 90G11	53(44)	55(47)
SS90.3B	1x16 mm MULTISTOP ONE	1x16 mm MULTISTOP ONE	KI 50G11	52(44)	54(47)
			KI 75G11	53(45)	55(49)
			KI 90G11	54(45)	56(49)
SS90.3C	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE	KI 50G11	52(44)	54(47)
			KI 75G11	53(45)	55(48)
			KI 90G11	53(45)	55(48)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

STAGGERED STUD

SS90.4

FIRE RESISTANCE LEVEL
NLB **-/90/90⁺**
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x16 mm fire resistant pbd
+ 1x13 mm non-fire
resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x16 mm fire resistant pbd
+ 1x13 mm non-fire
resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	150	208
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS90.4A	1x16 mm FIRESTOP + 1x13 mm SHEETROCK ONE	1x16 mm FIRESTOP + 1x13 mm SHEETROCK ONE	KI 50G11	-	58(52)
			KI 75G11	57(50)	-
SS90.4B	1x16 mm MULTISTOP ONE + 1x13 mm WETSTOP	1x16 mm MULTISTOP ONE + 1x13 mm WETSTOP	KI 50G11	-	58(52)
			KI 75G11	57(50)	-

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

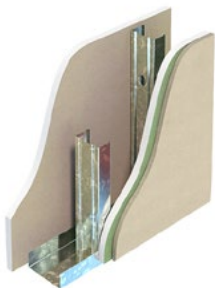
STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SS90.5

FIRE RESISTANCE LEVEL
NLB **-/90/90⁺**
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x16 mm FIRESTOP
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x16 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	130	188
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS90.5B	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	59(51)	-

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

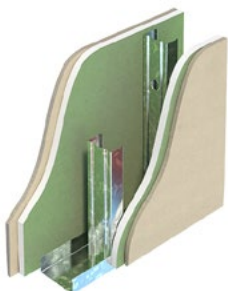
Height Limiting Factor: d – deflection, s – permissible strength

STAGGERED STUD

SS90.6

FIRE RESISTANCE LEVEL
NLB -/90/90*
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm FIRESTOP
+ 1x6 mm VILLABOARD
- Framing:** Staggered steel studs
- Insulation:** Refer to table
- Side 2:** 1x16 mm FIRESTOP
+ 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	136	194
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS90.6B	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	57(50)	58(54)
			KI 75G11	58(51)	60(55)
			KI 90G11	59(52)	61(56)

- * KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
- * KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
- KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
- KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density
- + Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SS120.1

FIRE RESISTANCE LEVEL
NLB -/120/120
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1:** 2x13 mm fire resistant pbd
- Framing:** Staggered steel studs
- Insulation:** Refer to table
- Side 2:** 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144	202
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS120.1A	2x13 mm FIRESTOP	2x13 mm FIRESTOP	Nil	47(41)	50(43)
			KI 50G11	56(49)	58(53)
			KI 75G11	57(50)	59(54)
			KI 90G11	58(51)	60(55)
SS120.1B	2x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	Nil	49(42)	51(44)
			KI 50G11	58(51)	59(55)
			KI 75G11	59(52)	60(56)
			KI 90G11	60(53)	61(57)
SS120.1C	2x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	Nil	48(42)	51(44)
			KI 50G11	57(50)	58(53)
			KI 75G11	58(51)	60(55)
			KI 90G11	59(52)	61(56)
SS120.1D	2x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	Nil	49(42)	51(44)
			KI 50G11	58(51)	59(55)
			KI 75G11	59(52)	60(56)
			KI 90G11	60(53)	61(57)
SS120.1E	2x13 mm FIRESTOP	2x13 mm IMPACTSTOP	Nil	48(42)	51(44)
			KI 50G11	57(50)	58(53)
			KI 75G11	58(51)	60(55)
			KI 90G11	59(52)	61(56)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

- * KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
- * KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
- KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
- KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

STAGGERED STUD

SS120.2

FIRE RESISTANCE LEVEL
NLB **-/120/120**
FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 2x16 mm fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 2x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-01S02(R9)

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	154	214
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS120.2A	2x16 mm FIRESTOP	2x16 mm FIRESTOP	Nil	48(41)	51(42)
			KI 50G11	57(52)	59(55)
			KI 75G11	58(53)	60(56)
			KI 90G11	59(54)	61(57)
SS120.2B	2x16 mm MULTISTOP ONE	2x16 mm MULTISTOP ONE	Nil	49(42)	52(44)
			KI 50G11	58(53)	59(56)
			KI 75G11	59(54)	60(57)
			KI 90G11	60(55)	61(58)
SS120.2C	2x16 mm FIRESTOP	2x16 mm MULTISTOP ONE	Nil	49(41)	52(43)
			KI 50G11	58(52)	59(55)
			KI 75G11	59(53)	60(56)
			KI 90G11	60(55)	61(58)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

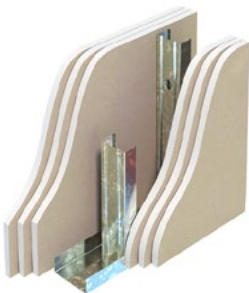
STUD SPACING mm	600				
	STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 s	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: s – permissible strength

SS180.3

FIRE RESISTANCE LEVEL
NLB **-/180/180**
FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 3x16 mm fire resistant pbd
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 3x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-15F01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	188	246
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SS180.3A	3x16 mm FIRESTOP	3x16 mm FIRESTOP	Nil	54(47)	56(51)
			KI 50G11	63(57)	65(61)
			KI 75G11	63(57)	65(61)
			KI 90G11	64(58)	66(62)
SS180.3B	3x16 mm MULTISTOP ONE	3x16 mm MULTISTOP ONE	Nil	55(48)	57(52)
			KI 50G11	64(58)	66(62)
			KI 75G11	64(58)	66(62)
			KI 90G11	65(59)	67(63)
SS180.3C	3x16 mm FIRESTOP	3x16 mm MULTISTOP ONE	Nil	54(47)	56(51)
			KI 50G11	63(57)	65(61)
			KI 75G11	63(57)	65(61)
			KI 90G11	64(58)	66(62)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	STUD SIZE mm	NA	64	76	92
BASE METAL THICKNESS mm	0.50	NA	2300 f	NA	NA
	0.55	NA	NA	2610 f	2740 s
	0.75	NA	2700 f	3000 f	3190 s
	1.15	NA	3000 f	3500 f	3750 s

Height Limiting Factor: f – fire height, s – permissible strength

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector.
Blue text indicates systems and products suitable for wet areas.

FIBEROCK® AQUA-TOUGH™ – STAGGERED STUD

SSF30.1

FIRE RESISTANCE LEVEL
NLB **-/30/30**
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK
AQUA-TOUGH
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x13 mm FIBEROCK
AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-SS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	118	176
			TRACK SIZE mm	92	150
			INSULATION*	$R_w(R_w+C_{tr})$	
SSF30.1A	1x13 mm FIBEROCK AQUA-TOUGH	1x13 mm FIBEROCK AQUA-TOUGH	Nil	41(33)	44(36)
			KI 50G11	51(42)	52(44)
			KI 75G11	53(44)	54(45)
			KI 90G11	54(45)	55(46)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SSF30.2

FIRE RESISTANCE LEVEL
NLB **-/30/30**
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK
AQUA-TOUGH
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 2x13 mm FIBEROCK
AQUA-TOUGH

ACOUSTIC RATINGS BASIS: BASIS: SLR-FB-S-SS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	131	189
			TRACK SIZE mm	92	150
			INSULATION*	$R_w(R_w+C_{tr})$	
SSF30.2A	1x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	46(38)	49(41)
			KI 50G11	56(47)	57(48)
			KI 75G11	57(48)	58(49)
			KI 90G11	58(49)	59(50)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

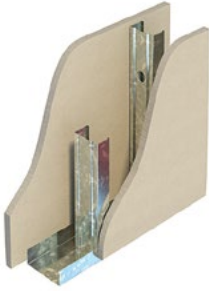
Height Limiting Factor: d – deflection, s – permissible strength

FIBEROCK® AQUA-TOUGH™ – STAGGERED STUD

SSF60.1

FIRE RESISTANCE LEVEL
NLB **-/60/60**
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x16 mm FIBEROCK AQUA-TOUGH
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 1x16 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-SS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	124	182
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSF60.1A	1x16 mm FIBEROCK AQUA-TOUGH	1x16 mm FIBEROCK AQUA-TOUGH	Nil	45(37)	48(40)
			KI 50G11	55(46)	56(47)
			KI 75G11	57(48)	58(49)
			KI 90G11	58(49)	59(50)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SSF90.1

FIRE RESISTANCE LEVEL
NLB **-/90/90**
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 2x13 mm FIBEROCK AQUA-TOUGH
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 2x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-SS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144	202
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSF90.1A	2x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	52(43)	55(47)
			KI 50G11	60(49)	63(53)
			KI 75G11	62(51)	64(54)
			KI 90G11	63(52)	65(55)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600			
STUD SIZE mm		51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	NA
	0.75	NA	2830 s	3000 s	NA
	1.15	NA	3510 s	3600 s	NA

Height Limiting Factor: d – deflection, s – permissible strength

[^]System SSF90.1 must utilise 51 mm, 64 mm or 76 mm studs only.

FIBEROCK® AQUA-TOUGH™ – STAGGERED STUD

SSF120.1[^]

FIRE RESISTANCE LEVEL
NLB -/120/120
 FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

- Side 1:** 2x13 mm FIBEROCK AQUA-TOUGH
- Framing:** Staggered steel studs
- Insulation:** Refer to table
- Side 2:** 2x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-SS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	144	202
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSF120.1A	2x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	-	55(47)
			KI 50G11	-	63(53)
			KI 75G11	-	64(54)
			KI 90G11	-	65(55)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)			
	51	64	76	92
STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	NA	NA	NA
	0.55	NA	NA	2740 s
	0.75	NA	NA	3190 s
	1.15	NA	NA	3750 s

Height Limiting Factor: s – permissible strength

[^]System SSF120.1 must utilise 92 mm studs only.

SSF120.2

FIRE RESISTANCE LEVEL
NLB -/120/120
 FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

- Side 1:** 2x16 mm FIBEROCK AQUA-TOUGH
- Framing:** Staggered steel studs
- Insulation:** Refer to table
- Side 2:** 2x16 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-SS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	156	214
			TRACK SIZE	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSF120.2A	2x16 mm FIBEROCK AQUA-TOUGH	2x16 mm FIBEROCK AQUA-TOUGH	Nil	54(44)	58(48)
			KI 50G11	62(56)	62(58)
			KI 75G11	64(58)	64(59)
			KI 90G11	65(59)	65(60)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)			
	51	64	76	92
STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA
	0.55	NA	NA	2610 s
	0.75	NA	2830 s	3000s
	1.15	NA	3510 s	3600 s

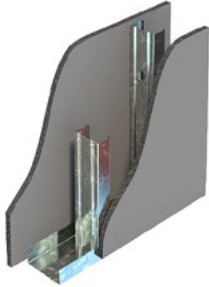
Height Limiting Factor: d – deflection, s – permissible strength

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 Blue text indicates systems and products suitable for wet areas.

PERMAROCK® – STAGGERED STUD

SSP.1

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: Non-fire resistant lining
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: Non-fire resistant lining

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	117.5	175.5
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSP.1A	1x12.5 mm PERMAROCK	1x12.5 mm PERMAROCK	Nil	41(34)	42(36)
			KI 50G11	48(39)	49(41)
			KI 75G11	49(40)	50(42)
			KI 90G11	50(41)	51(43)
SSP.1B	1x12.5 mm PERMAROCK	1x13 mm SHEETROCK ONE	Nil	40(32)	41(34)
			KI 50G11	47(37)	48(39)
			KI 75G11	48(38)	49(40)
			KI 90G11	49(39)	50(41)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

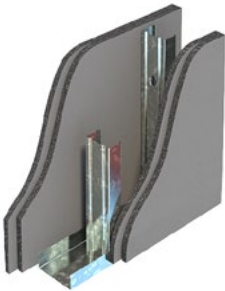
SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600			
	51	64	76	92
STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA
	0.55	NA	NA	2610 s
	0.75	NA	2830 s	3000 s
	1.15	NA	3510 s	3600 s

Height Limiting Factor: d – deflection, s – permissible strength

SSP.2

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2 x Non-fire resistant lining
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: 2 x Non-fire resistant lining

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	143	201
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSP.2A	2x12.5 mm PERMAROCK	2x12.5 mm PERMAROCK	Nil	48(42)	49(44)
			KI 50G11	57(50)	58(52)
			KI 75G11	58(51)	59(53)
			KI 90G11	59(52)	60(54)
SSP.2B	2x12.5 mm PERMAROCK	2x13 mm SHEETROCK ONE	Nil	47(40)	48(42)
			KI 50G11	56(48)	57(50)
			KI 75G11	57(49)	58(51)
			KI 90G11	58(50)	59(52)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600			
	51	64	76	92
STUD SIZE mm	51	64	76	92
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA
	0.55	NA	NA	2610 s
	0.75	NA	2830 s	3000 s
	1.15	NA	3510 s	3600 s

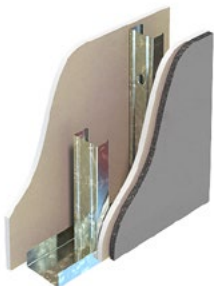
Height Limiting Factor: d – deflection, s – permissible strength

PERMAROCK® – STAGGERED STUD

SSP60.1

FIRE RESISTANCE LEVEL
NLB **-/60/60⁺**
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: Refer to table
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	130.5, 143	188.5, 201
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSP60.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	53(44)	55(47)
			KI 75G11	54(45)	56(48)
			KI 90G11	55(46)	57(49)
SSP60.1B	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	56(49)	58(52)
			KI 75G11	57(50)	59(53)
			KI 90G11	58(51)	60(54)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

In wet areas use MULTISTOP ONE or MULTISTOP ONE HI in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

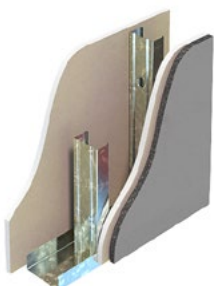
STUD SPACING mm	600				
	51	64	76	92	
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

SSP90.1

FIRE RESISTANCE LEVEL
NLB **-/90/90⁺**
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: Refer to table
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	136.5, 149	194.5, 207
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSP90.1A	1x16 mm FIRESTOP	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	55(46)	57(49)
			KI 75G11	56(47)	58(50)
			KI 90G11	57(48)	59(51)
SSP90.1B	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	57(50)	59(53)
			KI 75G11	58(51)	60(54)
			KI 90G11	59(52)	61(55)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

In wet areas use MULTISTOP ONE in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	51	64	76	92	
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

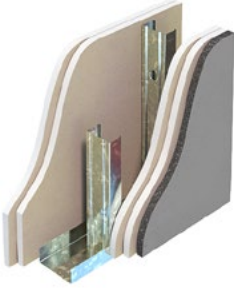
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PERMAROCK® – STAGGERED STUD

SSP120.1

FIRE RESISTANCE LEVEL
NLB -/120/120
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: Refer to table
Framing: Staggered steel studs
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	156.5, 169	214.5, 227
			TRACK SIZE mm	92	150
			INSULATION*	R _w (R _w +C _{tr})	
SSP120.1A	2x13 mm FIRESTOP	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	Nil	50(45)	52(48)
			KI 50G11	57(50)	59(53)
			KI 75G11	58(51)	60(54)
			KI 90G11	59(52)	61(55)
SSP120.1B	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	Nil	50(46)	52(49)
			KI 50G11	59(54)	61(57)
			KI 75G11	60(55)	62(58)
			KI 90G11	61(56)	63(59)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

In wet areas use MULTISTOP ONE or MULTISTOP ONE HI in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600				
	51	64	76	92	
STUD SIZE mm					
BASE METAL THICKNESS mm	0.50	2320 d	2375 s	NA	NA
	0.55	NA	NA	2610 s	2740 s
	0.75	NA	2830 s	3000 s	3190 s
	1.15	NA	3510 s	3600 s	3750 s

Height Limiting Factor: d – deflection, s – permissible strength

TWIN STUD

ST.1

NON-FIRE RATED



SYSTEM DESCRIPTION

- Side 1:** 1x10 mm non-fire resistant pbd
- Framing:** Twin steel studs
- Gap:** 20 mm
- Insulation:** Refer to table
- Side 2:** 1x10 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03, SLR-SR-S-DS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	168	192	224	340		
			STUD SIZE mm	64	76	92	150		
			INSULATION*	R _w (R _w +C _{tr})					
ST.1A	1x10 mm SHEETROCK ONE	1x10 mm SHEETROCK ONE	Nil	33(25)	34(26)	35(27)	37(29)		
			KI 50G11	One Side	KI 50G11	39(32)	40(33)	41(34)	43(36)
					KI 75G11	-	41(33)	42(34)	44(36)
					KI 90G11	-	-	43(36)	45(38)
			KI 50G11	Both Sides	KI 50G11	41(34)	42(35)	43(36)	45(38)
					KI 75G11	-	43(35)	44(36)	46(38)
KI 90G11	-	-			45(38)	47(40)			
ST.1H	1x10 mm SHEETROCK PLUS	1x10 mm SHEETROCK PLUS	Nil	41(34)	42(35)	43(35)	45(37)		
			KI 50G11	One Side	KI 50G11	50(40)	50(41)	51(42)	51(45)
					KI 75G11	-	51(41)	51(42)	52(45)
					KI 90G11	-	-	51(42)	52(45)
			KI 50G11	Both Sides	KI 50G11	53(43)	53(44)	54(45)	54(48)
					KI 75G11	-	54(44)	54(45)	55(48)
KI 90G11	-	-			54(45)	55(48)			
ST.1I	1x10 mm SHEETROCK ONE	1x10 mm SHEETROCK PLUS	Nil	41(34)	42(35)	43(35)	45(37)		
			KI 50G11	One Side	KI 50G11	49(39)	50(41)	51(42)	51(44)
					KI 75G11	-	51(41)	51(42)	52(44)
					KI 90G11	-	-	51(42)	52(45)
			KI 50G11	Both Sides	KI 50G11	52(42)	53(44)	54(45)	54(47)
					KI 75G11	-	54(44)	54(45)	55(47)
KI 90G11	-	-			54(45)	55(48)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS			SERVICEABILITY PRESSURE: 0.25 kPa			
STUD SPACING mm		600 (NOGGED)				
STUD SIZE mm		64	76	92	150	
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA	
	0.55	NA	3200 2d	3610 2s	NA	
	0.75	3130 d	3580 2d	4130 2d	5330 2h	
	1.15	3530 d	4050 2d	4690 2d	5330 2h	

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2h – head track capacity (2 rows of noggings), 2s – strength (2 rows of noggings)

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 Blue text indicates systems and products suitable for wet areas.

TWIN STUD

ST.2

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2x10 mm non-fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x10 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03, SLR-SR-S-DS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	188	212	244	360		
			STUD SIZE mm	64	76	92	150		
			INSULATION*	$R_w(R_w + C_{tr})$					
ST.2A	2x10 mm SHEETROCK ONE	2x10 mm SHEETROCK ONE	Nil	41(33)	42(34)	43(35)	45(37)		
			KI 50G11	One Side	47(40)	48(41)	49(42)	51(44)	
					KI 75G11	-	49(41)	50(42)	52(44)
					KI 90G11	-	-	51(44)	53(46)
			KI 50G11	Both Sides	49(42)	50(43)	51(44)	53(46)	
					KI 75G11	-	51(43)	52(44)	54(46)
KI 90G11	-	-			53(46)	55(48)			
ST.2H	2x10 mm SHEETROCK PLUS	2x10 mm SHEETROCK PLUS	Nil	49(41)	50(42)	51(43)	54(45)		
			KI 50G11	One Side	58(47)	58(49)	59(50)	59(52)	
					KI 75G11	-	58(49)	59(50)	60(53)
					KI 90G11	-	-	59(50)	60(53)
			KI 50G11	Both Sides	61(50)	61(52)	62(53)	62(55)	
					KI 75G11	-	62(52)	62(53)	63(56)
KI 90G11	-	-			62(53)	63(56)			
ST.2I	2x10 mm SHEETROCK ONE	2x10 mm SHEETROCK PLUS	Nil	49(41)	50(42)	51(43)	54(45)		
			KI 50G11	One Side	57(47)	58(48)	58(49)	59(52)	
					KI 75G11	-	58(48)	59(49)	59(52)
					KI 90G11	-	-	59(49)	60(52)
			KI 50G11	Both Sides	60(50)	61(51)	61(52)	62(55)	
					KI 75G11	-	61(51)	62(52)	62(56)
KI 90G11	-	-			62(53)	63(56)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS		SERVICEABILITY PRESSURE: 0.25 kPa			
STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3200 2d	3610 2s	NA
	0.75	3130 d	3580 2d	4130 2d	5330 2h
	1.15	3530 d	4050 2d	4690 2d	5330 2h

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2h – head track capacity (2 rows of noggings), 2s – strength (2 rows of noggings)

TWIN STUD

ST.3

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm non-fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 1x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	174	198	230	346	
			STUD SIZE mm	64	76	92	150	
			INSULATION*	$R_w(R_w+C_{tr})$				
ST.3A	1x13 mm SHEETROCK ONE	1x13 mm SHEETROCK ONE	Nil	41(35)	42(35)	43(35)	45(37)	
			KI 50G11	One Side	51(40)	51(41)	52(42)	52(44)
			KI 75G11		-	51(41)	52(42)	53(45)
			KI 90G11		-	-	52(42)	53(45)
			KI 50G11	Both Sides	54(43)	54(44)	55(45)	55(47)
			KI 75G11		-	54(44)	55(45)	56(48)
KI 90G11	-	-	55(45)		56(48)			
ST.3B	1x13 mm WETSTOP	1x13 mm WETSTOP	Nil	42(36)	43(36)	44(36)	46(38)	
			KI 50G11	One Side	52(41)	53(42)	53(43)	54(46)
			KI 75G11		-	53(42)	53(44)	54(46)
			KI 90G11		-	-	53(44)	54(46)
			KI 50G11	Both Sides	55(44)	56(45)	56(46)	57(49)
			KI 75G11		-	56(45)	56(47)	57(49)
KI 90G11	-	-	56(47)		57(49)			
ST.3K	1x13 mm SHEETROCK ONE	1x13 mm IMPACTSTOP	Nil	43(36)	44(37)	45(37)	47(39)	
			KI 50G11	One Side	53(42)	54(43)	54(45)	55(47)
			KI 75G11		-	54(43)	54(45)	55(47)
			KI 90G11		-	-	55(45)	55(47)
			KI 50G11	Both Sides	56(45)	57(46)	57(48)	58(50)
			KI 75G11		-	57(46)	57(48)	58(50)
KI 90G11	-	-	58(48)		58(50)			
ST.3L	1x13 mm WETSTOP	1x13 mm IMPACTSTOP	Nil	44(37)	45(37)	46(38)	48(39)	
			KI 50G11	One Side	54(43)	54(44)	55(45)	55(48)
			KI 75G11		-	55(44)	55(45)	56(48)
			KI 90G11		-	-	55(46)	56(48)
			KI 50G11	Both Sides	57(46)	57(47)	58(48)	58(51)
			KI 75G11		-	58(47)	58(48)	59(51)
KI 90G11	-	-	58(49)		59(51)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS		SERVICEABILITY PRESSURE: 0.25 kPa			
STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

TWIN STUD

ST.4

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2x13 mm non-fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	200	224	256	372	
			STUD SIZE mm	64	76	92	150	
			INSULATION*	$R_w(R_w+C_{tr})$				
ST.4A	2x13 mm SHEETROCK ONE	2x13 mm SHEETROCK ONE	Nil	50(42)	51(43)	52(44)	55(45)	
			KI 50G11	One Side	57(47)	58(49)	58(49)	58(52)
			KI 75G11		-	59(50)	59(50)	59(53)
			KI 90G11		-	-	60(51)	60(54)
			KI 50G11	Both Sides	60(50)	61(52)	61(52)	61(55)
			KI 75G11		-	62(53)	62(53)	62(56)
KI 90G11	-	-	63(54)		63(57)			
ST.4B	2x13 mm WETSTOP	2x13 mm WETSTOP	Nil	52(44)	53(44)	54(45)	57(47)	
			KI 50G11	One Side	58(48)	59(49)	59(51)	58(51)
			KI 75G11		-	60(50)	60(52)	59(52)
			KI 90G11		-	-	61(53)	60(53)
			KI 50G11	Both Sides	61(51)	62(52)	62(54)	61(54)
			KI 75G11		-	63(53)	63(55)	62(55)
KI 90G11	-	-	64(56)		63(56)			
ST.4K	2x13 mm SHEETROCK ONE	2x13 mm IMPACTSTOP	Nil	53(44)	54(45)	55(46)	58(48)	
			KI 50G11	One Side	59(49)	60(51)	60(52)	61(54)
			KI 75G11		-	61(52)	61(53)	62(55)
			KI 90G11		-	-	62(54)	63(56)
			KI 50G11	Both Sides	62(52)	63(54)	63(55)	64(57)
			KI 75G11		-	64(55)	64(56)	65(58)
KI 90G11	-	-	65(57)		66(59)			
ST.4L	2x13 mm WETSTOP	2x13 mm IMPACTSTOP	Nil	53(45)	54(46)	55(46)	58(49)	
			KI 50G11	One Side	60(50)	60(51)	61(53)	61(55)
			KI 75G11		-	61(52)	62(54)	62(56)
			KI 90G11		-	-	63(55)	63(57)
			KI 50G11	Both Sides	63(53)	63(54)	64(56)	64(58)
			KI 75G11		-	64(55)	65(57)	65(59)
KI 90G11	-	-	66(58)		66(60)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

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Blue text indicates systems and products suitable for wet areas.

TWIN STUD

ST30.1

FIRE RESISTANCE LEVEL

NLB -/30/30

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	174	198	230	346
			STUD SIZE mm	64	76	92	150
			INSULATION	$R_w(R_w+C_{tr})$			
ST30.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP	Nil	43(36)	44(37)	46(39)	47(39)
ST30.1B	1x13 mm MULTISTOP ONE	1x13 mm MULTISTOP ONE	Nil	45(38)	45(38)	46(39)	49(41)
ST30.1C	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE	Nil	44(37)	45(38)	45(38)	48(40)
ST30.1D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP	Nil	45(38)	45(38)	46(39)	49(41)
ST30.1E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP	Nil	44(37)	45(38)	45(38)	48(40)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

ST30.2

FIRE RESISTANCE LEVEL

NLB -/30/30

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	186	210	242	358
			STUD SIZE mm	64	76	92	150
			INSULATION	$R_w(R_w+C_{tr})$			
ST30.2B	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	Nil	50(42)	51(42)	54(45)	49(41)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

TWIN STUD

ST60.1

FIRE RESISTANCE LEVEL

NLB -/60/60*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 1x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm						
			174	198	230	346			
			STUD SIZE mm						
			64	76	92	150			
			INSULATION*						
			$R_w(R_w+C_{tr})$						
ST60.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP	KI 50G11	One Side	53(43)	54(44)	54(45)	55(48)	
					KI 75G11	-	54(44)	54(45)	55(48)
					KI 90G11	-	-	55(46)	55(48)
			KI 50G11	Both Sides	56(46)	57(47)	57(48)	58(51)	
					KI 75G11	-	57(47)	57(48)	58(51)
					KI 90G11	-	-	58(49)	58(51)
ST60.1B	1x13 mm MULTISTOP ONE	1x13 mm MULTISTOP ONE	KI 50G11	One Side	55(45)	55(46)	56(47)	56(49)	
					KI 75G11	-	56(46)	56(47)	56(49)
					KI 90G11	-	-	56(47)	56(49)
			KI 50G11	Both Sides	58(48)	58(49)	59(50)	59(52)	
					KI 75G11	-	59(49)	59(50)	59(52)
					KI 90G11	-	-	59(50)	59(52)
ST60.1C	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE	KI 50G11	One Side	54(44)	55(45)	55(46)	56(49)	
					KI 75G11	-	55(45)	55(46)	56(49)
					KI 90G11	-	-	56(46)	56(49)
			KI 50G11	Both Sides	57(47)	58(48)	58(49)	59(52)	
					KI 75G11	-	58(48)	58(49)	59(52)
					KI 90G11	-	-	59(49)	59(52)
ST60.1D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP	KI 50G11	One Side	55(45)	55(46)	56(47)	56(49)	
					KI 75G11	-	56(46)	56(47)	56(49)
					KI 90G11	-	-	56(47)	56(49)
			KI 50G11	Both Sides	58(48)	58(49)	59(50)	59(52)	
					KI 75G11	-	59(49)	59(50)	59(52)
					KI 90G11	-	-	59(50)	59(52)
ST60.1E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP	KI 50G11	One Side	54(44)	55(45)	55(46)	56(49)	
					KI 75G11	-	55(45)	55(46)	56(49)
					KI 90G11	-	-	56(46)	56(49)
			KI 50G11	Both Sides	57(47)	58(48)	58(49)	59(52)	
					KI 75G11	-	58(48)	58(49)	59(52)
					KI 90G11	-	-	59(49)	59(52)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

TWIN STUD

ST60.2

FIRE RESISTANCE LEVEL
 NLB -/60/60*
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm FIRESTOP
- Framing:** Twin steel studs
- Gap:** 20 mm
- Insulation:** Refer to table
- Side 2:** 1x13 mm fire resistant pbd + 1x13 mm non-fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm		187	211	243	359
			STUD SIZE mm		64	76	92	150
			INSULATION*		R _w (R _w +C _{tr})			
ST60.2A	1x13 mm FIRESTOP	1x13 mm FIRESTOP + 1x13 mm SHEETROCK ONE	KI 50G11	Both Sides	59(49)	59(50)	60(51)	60(54)
			KI 75G11	Both Sides	60(50)	61(51)	61(53)	62(55)
ST60.2B	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE + 1x13 mm WETSTOP	KI 50G11	Both Sides	59(49)	60(50)	60(52)	61(54)
			KI 75G11	Both Sides	60(50)	61(52)	62(53)	62(55)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

ST60.3

FIRE RESISTANCE LEVEL
 NLB -/60/60*
 LB 30/30/30
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** 1x13 mm FIRESTOP
- Framing:** Twin steel studs
- Gap:** 20 mm
- Insulation:** Refer to table
- Side 2:** 1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm		180	204	236	352
			STUD SIZE mm		64	76	92	150
			INSULATION*		R _w (R _w +C _{tr})			
ST60.3B	1x13 mm FIRESTOP	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	KI 50G11	Both Sides	59(49)	60(51)	60(52)	61(54)
			KI 75G11	Both Sides	61(51)	61(52)	62(53)	62(56)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

TWIN STUD

ST60.4

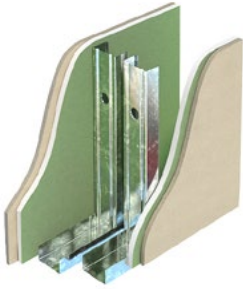
FIRE RESISTANCE LEVEL

NLB -/60/60*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x13 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD

Framing: Twin steel studs

Gap: 20 mm

Insulation: Refer to table

Side 2: 1x13 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	186	210	242	358
			STUD SIZE mm	64	76	92	150
			INSULATION*	R _w (R _w +C _{tr})			
ST60.4B	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x13 mm MULTISTOP ONE + 1x6 mm VILLABOARD	One Side	58(48)	59(49)	59(50)	60(53)
				-	60(50)	60(51)	61(54)
				-	-	62(52)	62(55)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density

KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density

KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	STUD SPACING mm		600 (NOGGED)			
	STUD SIZE mm		64	76	92	150
	0.50	0.55	2720 d	NA	NA	NA
	0.75	1.15	3250 d	3820 2d	4180 2d	5370 2s
			3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

ST60.5

FIRE RESISTANCE LEVEL

NLB -/60/60

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd

Framing: Twin steel studs

Gap: 20 mm

Insulation: Refer to table

Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	187	211	243	359
			STUD SIZE mm	64	76	92	150
			INSULATION	R _w (R _w +C _{tr})			
ST60.5A	1x13 mm FIRESTOP	2x13 mm FIRESTOP	Nil	48(41)	49(42)	50(42)	52(44)
ST60.5B	1x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	Nil	50(42)	51(43)	52(44)	55(46)
ST60.5C	1x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	Nil	50(42)	50(42)	51(43)	54(45)
ST60.5D	1x13 mm IMPACTSTOP	1x13 mm IMPACTSTOP	Nil	50(42)	51(43)	52(44)	55(46)
ST60.5E	1x13 mm FIRESTOP	1x13 mm IMPACTSTOP	Nil	50(42)	50(42)	51(43)	54(45)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	STUD SPACING mm		600 (NOGGED)			
	STUD SIZE mm		64	76	92	150
	0.50	0.55	2720 d	NA	NA	NA
	0.75	1.15	3250 d	3820 2d	4180 2d	5370 2s
			3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

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Blue text indicates systems and products suitable for wet areas.

TWIN STUD

ST60.6

FIRE RESISTANCE LEVEL

NLB -/60/60

LB 60/60/60 ACR 20%
FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x16 mm fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 1x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	180	204	236	352
			STUD SIZE mm	64	76	92	150
			INSULATION	$R_w(R_w+C_{tr})$			
ST60.6A	1x16 mm FIRESTOP	1x16 mm FIRESTOP	Nil	46(39)	47(40)	48(40)	51(42)
ST60.6B	1x16 mm MULTISTOP ONE	1x16 mm MULTISTOP ONE	Nil	48(41)	48(41)	49(42)	52(44)
ST60.6C	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE	Nil	47(40)	48(40)	49(41)	51(43)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

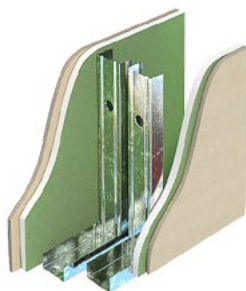
ST60.7

FIRE RESISTANCE LEVEL

NLB -/60/60

LB 60/60/60 ACR 20%
FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: 1x16 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 1x16 mm MULTISTOP ONE
+ 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	192	216	248	364
			STUD SIZE mm	64	76	92	150
			INSULATION	$R_w(R_w+C_{tr})$			
ST60.7B	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	Nil	51(43)	52(43)	54(44)	57(46)

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

TWIN STUD

ST90.1

FIRE RESISTANCE LEVEL

NLB -/90/90*

LB 30/30/30

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 1x13 mm fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm						
			187	211	243	359			
			STUD SIZE mm						
INSULATION*				R _w (R _w +C _{tr})					
ST90.1A	1x13 mm FIRESTOP	2x13 mm FIRESTOP	KI 50G11	One Side	57(47)	58(48)	58(49)	59(52)	
					KI 75G11	-	59(49)	59(50)	60(53)
					KI 90G11	-	-	60(51)	61(54)
			KI 50G11	Both Sides	60(50)	61(51)	61(52)	62(55)	
					KI 75G11	61(51)	62(52)	62(53)	63(56)
					KI 90G11	-	-	63(54)	64(57)
ST90.1B	1x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	KI 50G11	One Side	60(49)	60(50)	61(51)	61(54)	
					KI 75G11	-	61(51)	62(52)	62(55)
					KI 90G11	-	-	63(53)	63(56)
			KI 50G11	Both Sides	63(52)	63(53)	64(54)	64(57)	
					KI 75G11	64(53)	64(54)	65(55)	65(58)
					KI 90G11	-	-	66(56)	66(59)
ST90.1C	1x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	KI 50G11	One Side	58(48)	59(49)	59(50)	60(53)	
					KI 75G11	-	60(50)	60(51)	61(54)
					KI 90G11	-	-	61(52)	62(55)
			KI 50G11	Both Sides	61(51)	62(52)	62(53)	63(56)	
					KI 75G11	62(52)	63(53)	63(54)	64(57)
					KI 90G11	-	-	64(55)	65(58)
ST90.1D	1x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	KI 50G11	One Side	60(49)	60(50)	61(51)	61(54)	
					KI 75G11	-	61(51)	62(52)	62(55)
					KI 90G11	-	-	63(53)	63(56)
			KI 50G11	Both Sides	63(52)	63(53)	64(54)	64(57)	
					KI 75G11	64(53)	64(54)	65(55)	65(58)
					KI 90G11	-	-	66(56)	66(59)
ST90.1E	1x13 mm FIRESTOP	2x13 mm IMPACTSTOP	KI 50G11	One Side	58(48)	59(49)	59(50)	60(53)	
					KI 75G11	-	60(50)	60(51)	61(54)
					KI 90G11	-	-	61(52)	62(55)
			KI 50G11	Both Sides	61(51)	62(52)	62(53)	63(56)	
					KI 75G11	62(52)	63(53)	63(54)	64(57)
					KI 90G11	-	-	64(55)	65(58)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls

TWIN STUD

ST90.2

FIRE RESISTANCE LEVEL
 NLB **-/90/90+**
 LB **60/60/60** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm fire resistant pbd
- Framing:** Twin steel studs
- Gap:** 20 mm
- Insulation:** Refer to table
- Side 2:** 1x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm					
			180	204	236	352		
			STUD SIZE mm					
			64	76	92	150		
			INSULATION*					
			R _w (R _w +C _{tr})					
ST90.2A	1x16 mm FIRESTOP	1x16 mm FIRESTOP	One Side	KI 50G11	55(46)	55(47)	56(49)	56(51)
				KI 75G11	-	56(48)	57(50)	57(52)
				KI 90G11	-	-	58(51)	58(53)
			Both Sides	KI 50G11	58(49)	58(50)	59(52)	59(54)
				KI 75G11	59(50)	59(51)	60(53)	60(55)
ST90.2B	1x16 mm MULTISTOP ONE	1x16 mm MULTISTOP ONE	One Side	KI 50G11	57(48)	58(49)	58(51)	59(53)
				KI 75G11	-	59(50)	59(52)	60(54)
				KI 90G11	-	-	60(53)	61(55)
			Both Sides	KI 50G11	60(51)	61(52)	61(54)	62(56)
				KI 75G11	61(52)	62(53)	62(55)	63(57)
ST90.2C	1x16 mm FIRESTOP	1x16 mm MULTISTOP ONE	One Side	KI 50G11	56(47)	57(48)	57(50)	58(52)
				KI 75G11	-	58(49)	58(51)	59(53)
				KI 90G11	-	-	59(52)	60(54)
			Both Sides	KI 50G11	59(50)	60(51)	60(53)	61(55)
				KI 75G11	60(51)	61(52)	61(54)	62(56)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)			
	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA
	0.55	NA	3240 2d	3610 2s
	0.75	3250 d	3820 2d	4180 2d
	1.15	3580 d	4050 2d	4690 2d

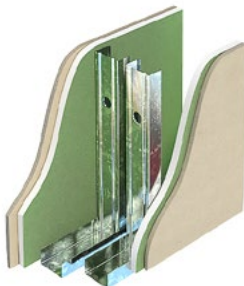
Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

ST90.3

FIRE RESISTANCE LEVEL
 NLB **-/90/90+**
 LB **60/60/60** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109,



SYSTEM DESCRIPTION

- Side 1:** 1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD
- Framing:** Twin steel studs
- Gap:** 20 mm
- Insulation:** Refer to table
- Side 2:** 1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm					
			192	216	248	364		
			STUD SIZE mm					
			64	76	92	150		
			INSULATION*					
			R _w (R _w +C _{tr})					
ST90.3B	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	1x16 mm MULTISTOP ONE + 1x6 mm VILLABOARD	One Side	KI 50G11	60(50)	61(51)	61(52)	62(54)
				KI 75G11	-	62(52)	63(53)	63(56)
				KI 90G11	-	-	64(54)	64(57)

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)			
	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA
	0.55	NA	3240 2d	3610 2s
	0.75	3250 d	3820 2d	4180 2d
	1.15	3580 d	4050 2d	4690 2d

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/e-selector
 Blue text indicates systems and products suitable for wet areas.

TWIN STUD

ST120.1

FIRE RESISTANCE LEVEL

NLB -/120/120

LB 90/90/90

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

- Side 1:** 2x13 mm fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x13 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	200	224	256	372	
			STUD SIZE mm	64	76	92	150	
			INSULATION*	$R_w(R_w+C_{tr})$				
ST120.1A	2x13 mm FIRESTOP	2x13 mm FIRESTOP	Nil	53(45)	54(45)	55(46)	58(49)	
			KI 50G11	One Side	59(50)	60(51)	60(51)	61(55)
			KI 75G11		-	61(52)	61(52)	62(56)
			KI 90G11		-	-	62(53)	63(57)
			KI 50G11	Both Sides	62(53)	63(54)	63(54)	64(58)
			KI 75G11		-	64(55)	64(55)	65(59)
KI 90G11	-	-	65(56)		66(60)			
ST120.1B	2x13 mm MULTISTOP ONE	2x13 mm MULTISTOP ONE	Nil	55(46)	56(47)	57(48)	60(50)	
			KI 50G11	One Side	61(52)	62(53)	62(54)	63(57)
			KI 75G11		-	63(54)	63(55)	64(58)
			KI 90G11		-	-	64(56)	65(59)
			KI 50G11	Both Sides	64(55)	65(56)	65(57)	66(60)
			KI 75G11		-	66(57)	66(58)	67(61)
KI 90G11	-	-	67(59)		68(62)			
ST120.1C	2x13 mm FIRESTOP	2x13 mm MULTISTOP ONE	Nil	54(46)	55(46)	56(47)	59(50)	
			KI 50G11	One Side	60(51)	61(52)	61(53)	62(56)
			KI 75G11		-	62(53)	62(54)	63(57)
			KI 90G11		-	-	63(55)	64(58)
			KI 50G11	Both Sides	63(54)	64(55)	64(56)	65(59)
			KI 75G11		-	65(56)	65(57)	66(60)
KI 90G11	-	-	66(58)		67(61)			
ST120.1D	2x13 mm IMPACTSTOP	2x13 mm IMPACTSTOP	Nil	55(46)	56(47)	57(48)	60(50)	
			KI 50G11	One Side	61(52)	62(53)	62(54)	63(57)
			KI 75G11		-	63(54)	63(55)	64(58)
			KI 90G11		-	-	64(56)	65(59)
			KI 50G11	Both Sides	64(55)	65(56)	65(57)	66(60)
			KI 75G11		-	66(57)	66(58)	67(61)
KI 90G11	-	-	67(59)		68(62)			
ST120.1E	2x13 mm FIRESTOP	2x13 mm IMPACTSTOP	Nil	54(46)	55(46)	56(47)	59(50)	
			KI 50G11	One Side	60(51)	61(52)	61(53)	62(56)
			KI 75G11		-	62(53)	62(54)	63(57)
			KI 90G11		-	-	63(55)	64(58)
			KI 50G11	Both Sides	63(54)	64(55)	64(56)	65(59)
			KI 75G11		-	65(56)	65(57)	66(60)
KI 90G11	-	-	66(58)		67(61)			

MULTISTOP ONE HI may be a direct substitute for MULTISTOP ONE for FRL and acoustic performance of the same board thickness

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ densityKI 75G11 – 75 mm glasswool insulation 11 kg/m³ densityKI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*		SERVICEABILITY PRESSURE: 0.25 kPa			
STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

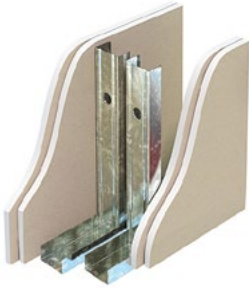
*Refer Rondo for maximum heights for load bearing walls

TWIN STUD

ST120.2

FIRE RESISTANCE LEVEL
 NLB **-/120/120**
 LB **120/120/120** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 2x16 mm fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TE405-20S03

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	212	236	268	384		
			STUD SIZE mm	64	76	92	150		
			INSULATION*	R _w (R _w +C _{tr})					
ST120.2A	2x16 mm FIRESTOP	2x16 mm FIRESTOP	Nil	52(44)	53(45)	54(46)	58(49)		
			KI 50G11	One Side	61(51)	61(52)	62(53)	62(55)	
					KI 75G11	-	62(53)	63(54)	63(56)
					KI 90G11	-	-	64(55)	64(57)
			KI 50G11	Both Sides	64(54)	64(55)	65(56)	65(58)	
					KI 75G11	-	65(56)	66(57)	66(59)
KI 90G11	-	-			67(58)	67(60)			
ST120.2B	2x16 mm MULTISTOP ONE	2x16 mm MULTISTOP ONE	Nil	53(46)	54(47)	55(48)	59(51)		
			KI 50G11	One Side	61(53)	62(54)	62(55)	63(57)	
					KI 75G11	-	63(55)	63(56)	64(58)
					KI 90G11	-	-	64(57)	65(59)
			KI 50G11	Both Sides	64(56)	65(57)	65(58)	66(60)	
					KI 75G11	-	66(58)	66(59)	67(61)
KI 90G11	-	-			67(60)	68(62)			
ST120.2C	2x16 mm FIRESTOP	2x16 mm MULTISTOP ONE	Nil	53(45)	54(46)	55(47)	59(50)		
			KI 50G11	One Side	61(52)	61(53)	62(54)	62(56)	
					KI 75G11	-	62(54)	63(55)	63(57)
					KI 90G11	-	-	64(56)	64(58)
			KI 50G11	Both Sides	64(55)	64(56)	65(57)	65(59)	
					KI 75G11	-	65(57)	66(58)	66(60)
KI 90G11	-	-			67(59)	67(61)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2750 d	NA	NA	NA
	0.55	NA	3250 2d	3610 2s	NA
	0.75	3280 2d	3870 2d	4200 2d	5370 2s
	1.15	3590 2d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

TWIN STUD

ST180.4

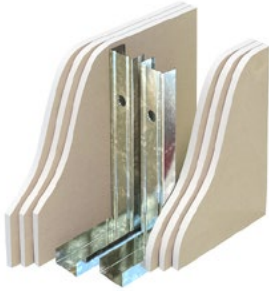
FIRE RESISTANCE LEVEL

NLB -/180/180

LB 120/120/120

FROM BOTH SIDES

FRL Basis: FC16109, FC15815



SYSTEM DESCRIPTION

Side 1: 3x16 mm fire resistant pbd
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 3x16 mm fire resistant pbd

ACOUSTIC RATINGS BASIS: RT&A TK778-15F01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	244	268	300	416	
			STUD SIZE mm	64	76	92	150	
			INSULATION*	$R_w(R_w+C_{tr})$				
ST180.4A	3x16 mm FIRESTOP	3x16 mm FIRESTOP	Nil	57(52)	58(53)	59(54)	61(58)	
			KI 50G11	One Side	65(58)	66(59)	67(60)	69(64)
			KI 75G11		65(58)	66(59)	67(60)	69(64)
			KI 90G11		65(58)	66(59)	67(60)	69(64)
			KI 50G11	Both Sides	68(61)	69(62)	70(63)	72(67)
			KI 75G11		-	69(62)	70(63)	72(67)
			KI 90G11		-	-	70(63)	72(67)
ST180.4B	3x16 mm MULTISTOP ONE	3x16 mm MULTISTOP ONE	Nil	58(53)	59(54)	60(55)	62(59)	
			KI 50G11	One Side	66(59)	67(60)	68(61)	70(65)
			KI 75G11		66(59)	67(60)	68(61)	70(65)
			KI 90G11		66(59)	67(60)	68(61)	70(65)
			KI 50G11	Both Sides	69(62)	70(63)	71(64)	73(68)
			KI 75G11		-	70(63)	71(64)	73(68)
			KI 90G11		-	-	71(64)	73(68)
ST180.4C	3x16 mm FIRESTOP	3x16 mm MULTISTOP ONE	Nil	57(52)	58(53)	59(54)	61(58)	
			KI 50G11	One Side	65(58)	66(59)	67(60)	69(64)
			KI 75G11		65(58)	66(59)	67(60)	69(64)
			KI 90G11		65(58)	66(59)	67(60)	69(64)
			KI 50G11	Both Sides	68(61)	69(62)	70(63)	72(67)
			KI 75G11		-	69(62)	70(63)	72(67)
			KI 90G11		-	-	70(63)	72(67)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2300 f	NA	NA	NA
	0.55	NA	2700 f	3500 f	NA
	0.75	2700 f	3000 f	3500 f	5000 f
	1.15	3000 f	3500 f	4000 f	5900 f

Height Limiting Factor: f – fire height

*Refer Rondo for maximum heights for load bearing walls

FIBEROCK® AQUA-TOUGH™ – TWIN STUD

STF.3

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK AQUA-TOUGH
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 1x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-DS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	174	198	230	346	
			STUD SIZE mm	64	76	92	150	
			INSULATION*	R _w (R _w +C _{tr})				
STF.3A	1x13 mm FIBEROCK AQUA-TOUGH	1x13 mm FIBEROCK AQUA-TOUGH	Nil	45(38)	45(39)	46(40)	47(42)	
			KI 50G11	One Side	53(43)	54(44)	55(45)	56(48)
					-	55(45)	56(46)	57(49)
					-	-	56(46)	57(49)
			KI 50G11	Both Sides	55(45)	56(46)	57(47)	58(50)
					-	57(47)	58(48)	59(51)
-	-	59(50)			60(53)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

STF30.1

FIRE RESISTANCE LEVEL
 NLB -/30/30
 FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x13 mm FIBEROCK AQUA-TOUGH
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-DS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	187	211	243	359	
			STUD SIZE mm	64	76	92	150	
			INSULATION*	R _w (R _w +C _{tr})				
STF30.1A	1x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	49(41)	50(42)	51(43)	52(48)	
			KI 50G11	One Side	58(48)	59(50)	60(51)	61(54)
					-	60(51)	61(52)	62(55)
					-	-	61(52)	62(55)
			KI 50G11	Both Sides	60(50)	61(51)	62(52)	63(56)
					61(51)	62(52)	63(53)	64(57)
-	-	64(54)			65(58)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

FIBEROCK® AQUA-TOUGH™ – TWIN STUD

STF60.1

FIRE RESISTANCE LEVEL
NLB **-/60/60**
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 1x16 mm FIBEROCK
AQUA-TOUGH
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 1x16 mm FIBEROCK
AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-DS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	180	204	236	352		
			STUD SIZE mm	64	76	92	150		
			INSULATION*	$R_w(R_w+C_{tr})$					
STF60.1A	1x16 mm FIBEROCK AQUA-TOUGH	1x16 mm FIBEROCK AQUA-TOUGH	Nil	48(40)	48(41)	49(42)	50(46)		
			KI 50G11	One Side	57(47)	58(49)	59(50)	60(53)	
					-	59(50)	60(51)	61(54)	
					-	-	60(51)	61(54)	
			KI 50G11	Both Sides	59(49)	60(50)	61(51)	62(55)	
					KI 75G11	60(50)	61(51)	62(52)	63(56)
					KI 90G11	-	-	63(53)	64(57)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2750 s	NA	NA	NA
	0.55	NA	3250 2d	3610 2s	NA
	0.75	3280 d	3870 2d	4200 2d	5370 2s
	1.15	3590 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, s – permissible strength, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

STF90.1[^]

FIRE RESISTANCE LEVEL
NLB **-/90/90**
FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 2x13 mm FIBEROCK
AQUA-TOUGH
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x13 mm FIBEROCK
AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-DS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	200	224	256	372		
			STUD SIZE mm	64	76	92	150		
			INSULATION*	$R_w(R_w+C_{tr})$					
STF90.1A	2x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	56(47)	57(48)	-	-		
			KI 50G11	One Side	65(54)	66(55)	-	-	
					-	67(56)	-	-	
					-	-	-	-	
			KI 50G11	Both Sides	67(56)	68(57)	-	-	
					KI 75G11	-	69(58)	-	-
					KI 90G11	-	-	-	-

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	NA	NA
	0.75	3250 d	3820 2d	NA	NA
	1.15	3580 d	4050 2d	NA	NA

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings)

[^]System STF90.1 must utilise 64 mm or 76 mm studs only.

FIBEROCK® AQUA-TOUGH™ – TWIN STUD

STF120.1^A

FIRE RESISTANCE LEVEL
NLB -/120/120
 FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 2x13 mm FIBEROCK AQUA-TOUGH
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x13 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-DS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	200	224	256	372		
			STUD SIZE mm	64	76	92	150		
			INSULATION*	R _w (R _w +C _{tr})					
STF120.1A	2x13 mm FIBEROCK AQUA-TOUGH	2x13 mm FIBEROCK AQUA-TOUGH	Nil	-	-	57(51)	58(52)		
			KI 50G11	One Side	-	-	67(58)	68(60)	
					KI 75G11	-	-	68(59)	69(61)
					KI 90G11	-	-	68(59)	69(61)
			KI 50G11	Both Sides	-	-	69(60)	70(62)	
					KI 75G11	-	-	70(61)	71(63)
KI 90G11	-	-			71(62)	72(64)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	NA	NA	NA	NA
	0.55	NA	NA	3610 2s	NA
	0.75	NA	NA	4810 2d	5370 2s
	1.15	NA	NA	4690 2d	6810 3s

Height Limiting Factor: 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*System STF120.1 must utilise 92 mm or 150 mm studs only.

STF120.2

FIRE RESISTANCE LEVEL
NLB -/120/120
 FROM BOTH SIDES

FRL Basis: Contact Knauf



SYSTEM DESCRIPTION

Side 1: 2x16 mm FIBEROCK AQUA-TOUGH
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2x16 mm FIBEROCK AQUA-TOUGH

ACOUSTIC RATINGS BASIS: SLR-FB-S-DS-01

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	MIN WALL WIDTH mm	212	236	268	384		
			STUD SIZE mm	64	76	92	150		
			INSULATION*	R _w (R _w +C _{tr})					
STF120.2A	2x16 mm FIBEROCK AQUA-TOUGH	2x16 mm FIBEROCK AQUA-TOUGH	Nil	58(49)	59(50)	60(53)	61(54)		
			KI 50G11	One Side	67(56)	68(57)	69(60)	70(62)	
					KI 75G11	-	69(58)	70(61)	71(63)
					KI 90G11	-	-	70(61)	71(63)
			KI 50G11	Both Sides	69(58)	70(59)	71(62)	72(64)	
					KI 75G11	-	71(60)	72(63)	73(65)
KI 90G11	-	-			73(64)	74(66)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

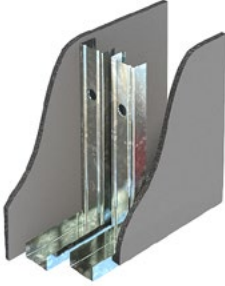
STUD SPACING mm		600 (NOGGED)			
STUD SIZE mm		64	76	92	150
BASE METAL THICKNESS mm	0.50	2750 d	NA	NA	NA
	0.55	NA	3250 2d	3610 2s	NA
	0.75	3280 d	3870 2d	4200 2d	5370 2s
	1.15	3590 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, s – permissible strength, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

PERMAROCK® – TWIN STUD

STP.1

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: Non-fire resistant lining
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: Non-fire resistant lining

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm		173.5	197.5	229.5
			STUD SIZE mm		64	76	92
			INSULATION*		$R_w(R_w+C_{tr})$		
STP.1A	1x12.5 mm PERMAROCK	1x12.5 mm PERMAROCK	Nil		44(36)	44(37)	45(38)
			One Side	KI 50G11	54(44)	54(45)	55(46)
				KI 75G11	-	54(45)	55(46)
				KI 90G11	-	-	55(46)
			Both Sides	KI 50G11	57(48)	57(48)	58(49)
				KI 75G11	-	57(48)	58(49)
KI 90G11	-	-		58(49)			
STP.1B	1x12.5 mm PERMAROCK	1x13 mm SHEETROCK ONE	Nil		43(34)	43(35)	44(36)
			One Side	KI 50G11	53(42)	53(43)	54(44)
				KI 75G11	-	53(43)	54(44)
				KI 90G11	-	-	54(44)
			Both Sides	KI 50G11	56(46)	56(46)	57(47)
				KI 75G11	-	56(46)	57(47)
KI 90G11	-	-		57(47)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

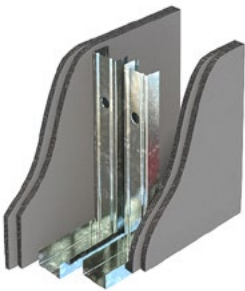
SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

STP.2

NON-FIRE RATED



SYSTEM DESCRIPTION

Side 1: 2 x Non-fire resistant lining
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: 2 x Non-fire resistant lining

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm		199	223	255
			STUD SIZE mm		64	76	92
			INSULATION*		$R_w(R_w+C_{tr})$		
STP.2A	2x12.5 mm PERMAROCK	2x12.5 mm PERMAROCK	Nil		55(47)	56(48)	56(49)
			One Side	KI 50G11	62(53)	63(54)	63(55)
				KI 75G11	-	63(54)	63(55)
				KI 90G11	-	-	63(55)
			Both Sides	KI 50G11	66(57)	66(57)	66(58)
				KI 75G11	-	66(57)	66(58)
KI 90G11	-	-		66(58)			
STP.2B	2x12.5 mm PERMAROCK	2x13 mm SHEETROCK ONE	Nil		54(45)	55(46)	55(47)
			One Side	KI 50G11	61(51)	62(52)	62(53)
				KI 75G11	-	62(52)	62(53)
				KI 90G11	-	-	62(53)
			Both Sides	KI 50G11	65(55)	65(55)	65(56)
				KI 75G11	-	65(55)	65(56)
KI 90G11	-	-		65(56)			

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

MAX WALL HEIGHTS NON-LOAD BEARING WALLS

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

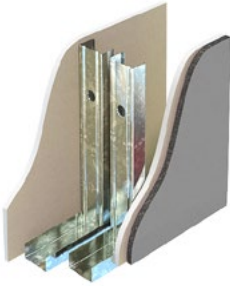
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 Blue text indicates systems and products suitable for wet areas.

PERMAROCK® – TWIN STUD

STP60.1

FIRE RESISTANCE LEVEL
 NLB **-/60/60***
 LB **30/30/30**
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** Refer to table
- Framing:** Twin steel studs
- Gap:** 20 mm
- Insulation:** Refer to table
- Side 2:** Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm					
			186.5, 199	210.5, 223	242.5, 255			
			STUD SIZE mm					
			INSULATION*					
			R _w (R _w +C _{tr})					
STP60.1A	1x13 mm FIRESTOP	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	One Side	60(50)	60(51)	60(52)	
					KI 75G11	-	61(51)	61(52)
					KI 90G11	-	-	61(52)
			KI 50G11	Both Sides	63(54)	63(54)	63(55)	
					KI 75G11	-	64(54)	64(55)
					KI 90G11	-	-	64(55)
STP60.1B	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	1x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	One Side	60(53)	61(54)	62(55)	
					KI 75G11	-	62(54)	63(55)
					KI 90G11	-	-	63(55)
			KI 50G11	Both Sides	65(57)	65(57)	65(58)	
					KI 75G11	-	66(57)	66(58)
					KI 90G11	-	-	66(58)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

In wet areas use MULTISTOP ONE or MULTISTOP ONE HI in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2720 d	NA	NA	NA
	0.55	NA	3240 2d	3610 2s	NA
	0.75	3250 d	3820 2d	4180 2d	5370 2s
	1.15	3580 d	4050 2d	4690 2d	6810 3s

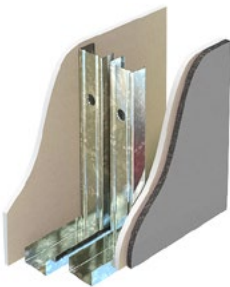
Height Limiting Factor: d – deflection, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

STP90.1

FIRE RESISTANCE LEVEL
 NLB **-/90/90***
 LB **60/60/60** ACR 20%
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

- Side 1:** Refer to table
- Framing:** Twin steel studs
- Gap:** 20 mm
- Insulation:** Refer to table
- Side 2:** Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm					
			192.5, 205	216.5, 229	248.5, 261			
			STUD SIZE mm					
			INSULATION*					
			R _w (R _w +C _{tr})					
STP90.1A	1x16 mm FIRESTOP	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	One Side	62(52)	62(53)	62(54)	
					KI 75G11	-	63(53)	63(54)
					KI 90G11	-	-	63(54)
			KI 50G11	Both Sides	65(56)	65(56)	65(57)	
					KI 75G11	-	66(56)	66(57)
					KI 90G11	-	-	66(57)
STP90.1B	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	1x16 mm FIRESTOP + 1x12.5 mm PERMAROCK	KI 50G11	One Side	61(54)	62(55)	63(56)	
					KI 75G11	-	63(55)	64(56)
					KI 90G11	-	-	64(56)
			KI 50G11	Both Sides	66(58)	66(58)	66(59)	
					KI 75G11	-	67(58)	67(59)
					KI 90G11	-	-	67(59)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

+ Must include specified minimum KI 50G11 in cavity to achieve FRL

In wet areas use MULTISTOP ONE in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

STUD SPACING mm	600 (NOGGED)				
	STUD SIZE mm	64	76	92	150
BASE METAL THICKNESS mm	0.50	2750 s	NA	NA	NA
	0.55	NA	3250 2d	3610 2s	NA
	0.75	3280 d	3870 2d	4200 2d	5370 2s
	1.15	3590 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, s – permissible strength, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)

*Refer Rondo for maximum heights for load bearing walls with ACR 20%

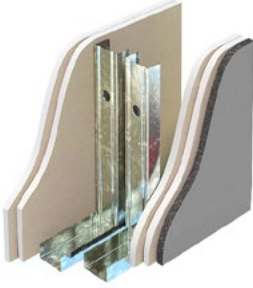
For the full range of Knauf systems refer to knauf.com/en-AU/knauf-gypsum/services/tools/eselector
 Blue text indicates systems and products suitable for wet areas.

PERMAROCK® – TWIN STUD

STP120.1

FIRE RESISTANCE LEVEL
 NLB -/120/120
 LB 90/90/90
 FROM BOTH SIDES

FRL Basis: FC16109



SYSTEM DESCRIPTION

Side 1: Refer to table
Framing: Twin steel studs
Gap: 20 mm
Insulation: Refer to table
Side 2: Refer to table

ACOUSTIC RATINGS BASIS: RT&A TK778-16F02

Based on studs @ 600 mm ctrs

SYSTEM	LINING SIDE 1	LINING SIDE 2	NOM WALL WIDTH mm	212.5, 225	236.5, 249	268.5, 281		
			STUD SIZE mm	64	76	92		
			INSULATION*	R _w (R _w +C _{tr})				
STP120.1A	2x13 mm FIRESTOP	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	Nil	53(45)	53(46)	53(47)		
			KI 50G11	One Side	63(53)	63(54)	63(55)	
					KI 75G11	-	64(54)	64(55)
					KI 90G11	-	-	64(55)
			KI 50G11	Both Sides	66(57)	66(57)	66(58)	
					KI 75G11	-	67(57)	67(58)
					KI 90G11	-	-	67(58)
STP120.1B	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	2x13 mm FIRESTOP + 1x12.5 mm PERMAROCK	Nil	57(51)	58(52)	59(53)		
			KI 50G11	One Side	64(57)	65(58)	66(59)	
					KI 75G11	-	66(58)	67(59)
					KI 90G11	-	-	67(59)
			KI 50G11	Both Sides	69(61)	69(61)	69(62)	
					KI 75G11	-	70(61)	70(62)
					KI 90G11	-	-	70(62)

* KI 50G11 – 50 mm glasswool insulation 11 kg/m³ density
 KI 75G11 – 75 mm glasswool insulation 11 kg/m³ density
 KI 90G11 – 90 mm glasswool insulation 11 kg/m³ density

In wet areas use MULTISTOP ONE or MULTISTOP ONE HI in place of FIRESTOP

MAX WALL HEIGHTS NON-LOAD BEARING WALLS*

SERVICEABILITY PRESSURE: 0.25 kPa

BASE METAL THICKNESS mm	600 (NOGGED)			
	STUD SPACING mm	64	76	92
0.50	2720 d	NA	NA	NA
0.55	NA	3240 2d	3610 2s	NA
0.75	3250 d	3820 2d	4180 2d	5370 2s
1.15	3580 d	4050 2d	4690 2d	6810 3s

Height Limiting Factor: d – deflection, s – permissible strength, 2d – deflection (2 rows of noggings), 2s – strength (2 rows of noggings), 3s – strength (3 rows of noggings)