KNAUF

TECHNICAL DATA SHEET

KNAUF RF

(Fire-Resistant – Fire-Rated Fr)
Gypsum Plasterboard

Build on us.

Introduction

Fire-resistant gypsum plasterboard – RF fire classification.

Content

Knauf Rf Gypsum Plasterboard

Product description

Knauf RF is a **fire-resistant gypsum plasterboard** designed for dry construction applications where enhanced fire performance is required. The board features a **glass fiber reinforced gypsum core** and is faced with approximately **≈90% reinforced recycled paper**.

Its **Type X (Type F) core** provides improved performance under fire exposure, contributing to **passive fire protection systems**, while also offering enhanced acoustic insulation.

The face paper is **pink/ivory** and the reverse side is **dark brown**. The board complies with **EN*** 520** and achieves **Reaction to Fire classification A1**. It also complies with **NTC 6159**.

Recommended applications

- **Internal partitions, walls and ceilings** requiring enhanced fire resistance performance.
- Drywall construction systems.
- Direct, semi-direct and self-supporting wall linings.
- Applications where **thermal and acoustic insulation** are required.
- Suitable for **dry internal environments only**; not suitable for areas with moisture exposure or direct water contact (e.g. bathrooms).

Key features and benefits

- **Non-combustible**, Reaction to Fire classification A1.
- High resistance to elevated temperatures, ideal for **passive fire protection systems**.
- Easy and fast installation.
- Lightweight and cost-effective solution.
- Surface suitable for a wide range of decorative finishes.
- Easy handling and installation, with **clean cutting**.
- Improved **dimensional stability** under temperature changes, reducing the risk of cracking at joints.
- Excellent **thermal and acoustic performance**, improving comfort and energy efficiency in internal spaces.
- For curved wall applications using Knauf gypsum boards, the recommended curvature radius values must be followed (see Table).

Technical properties

Thickness	Width	Length	Weight	Approx. Board Weight	Breaking Load Longitudina	Breaking Load Transversal	Core Hardness	Minimum Bending Radius	Density	Thermal Conductivity λ [W/(m·K)]
12,7 mm (1/2")	1220 mm	2440 mm	8,23 (kg/m²)	24,5 kg	160 N	476 N	>49 N	Dry: r > 2750 mm	630–680 kg/m³	0,230–0,235
15,8 mm (5/8")	1220 mm	2440 mm	10,41 (kg/m²)	31 kg	205 N	654 N	>49 N	N/A	650–700 kg/m³	0,230–0,235

*Technical requirements for gypsum boards are defined in **NTC 6159.** Bending must be applied along the longitudinal direction of the board. The radius must be limited to avoid damage, especially cracking.*

Physical characteristics

Color: Pink/ivory (face), dark brown (back)

Surface finish: Smooth, suitable for painting and finishing

Dimensional tolerances:

- Width: -3 mm
- Length: ± 6 mm
- Thickness: ± 0,4 mm
- Squareness: < 3 mm

Edge types:

- Long edges: **Tapered edge Type AK**
- Short edges: **Square edge**

Storage and handling

- Store in a dry and covered area, protected from moisture and direct sunlight.
- Store boards flat on a level surface (do not store on edge).
- Handle boards with two people to prevent edge damage.
- Do not expose to freezing conditions.

For more information, refer to the Knauf Colombia Warranty Manual, https://knauf.com/es-CO/p/productos

Installation guidelines

- Boards should be installed on **metal or wood framing**.
- Maintain a **12 mm (1/2") clearance** above the finished floor to prevent moisture absorption.
- Fix boards using appropriate drywall screws and a **power screwdriver with clutch.**
- Seal penetrations using **flexible sealants** when required by the system.

Knauf Rf Gypsum Plasterboard

- For maximum stud spacing in applications without fire resistance rating, refer to **NTC 5680 and/or NTC 5681**.
- For general installation requirements, refer to **GTC*** 329:2021** Guidelines for installation of dry construction systems and **NTC 6252** Requirements for installation and finishing of gypsum boards.
- For fire-rated applications, refer to the system design described in the corresponding fire test for the system to be installed.

Finishing levels

- Determine the appropriate finishing level depending on project lighting and requirements.
- Apply primer before painting to avoid absorption differences.
- Follow joint treatment recommendations for optimal finishing.
- For gloss or semi-gloss paint finishes recommended **Level 5**.
- Consult finishing level guidance in **NTC 6252 and GTC 329.**

Safety instructions

- Use respiratory protection (N95 mask) when sanding the surface or cutting the product.
- Protect eyes with safety goggles (ANSI Z87.1).
- In case of dust contact, move to a ventilated area.
- Avoid prolonged dust inhalation to prevent respiratory irritation.
- For more information, refer to the Safety Data Sheet.

Product disposal

- Waste management should be handled through authorized waste managers.
- Board scraps should be cut into smaller pieces at the end of the project for proper disposal and recycling.
- Comply with local environmental regulations for landfill disposal or recycling.
- For more information, refer to the Safety Data Sheet.

Limitations

- Do not expose to temperatures above 52°C or moisture.
- Do not use as a structural element.
- For ceiling and walls applications, follow the recommended support spacing GTC 329.
- Not suitable for direct water contact or humid environments.
- Service life depends on installation conditions and usage. Proper installation following the installation normativity is essential to maximize durability. Refer to **NTC 6252** (requirements for installation and finishing of gypsum boards) and **GTC 329**.

Standards and certifications

Technical requirements for gypsum plasterboards are defined in **NTC 6159** and **NTC 6252**.
Certifications: **NTC 5680 and/or NTC 5681**.

Manufacturer warranty

For more information, refer to the Knauf Colombia Warranty Manual. (Link pending)

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