

# ***KNAUF***

## ***INTERIOR FINISHING SOLUTIONS***

Faster, cleaner, superior finishes every time



***Build on us.***

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Knauf takes the hassle out of finishing with a full range of specialist materials. From powdered and ready-mixed jointing compounds, tapes and beads through to pre-mixed spray finishes as a convenient alternative to traditional plasters.

Knauf Finishing Solutions are included within a full system warranty.

**Build on us.**

## CITB Accredited Training Organisation



The Learning Zones at Immingham and Sittingbourne are CITB approved training facilities and offer various courses for the construction industry. We believe in future-proofing and protecting the workforce.

We provide the best possible training on the large variety of systems and products that we supply, and make our courses widely available to those who request them. Whether the trainees are already skilled tradespeople, wishing to add to their existing knowledge, or people with no previous experience, there is a course in our range to benefit all.

We are happy to advise on the suitability of different courses and the content can be adapted to suit the requirements of the delegates.

All work carried out on the Knauf courses will be in a simulated site environment, and to industry standards, using British Standard and European Codes of Practice for accuracy and finish.

Contact us to find out more about the latest courses available.

### Courses available

[Drylining – Direct bonding and metal lining systems](#)

[Fire protection – Encasement systems](#)

[General overview of interior products and systems](#)

[Metal stud partitions, shaft wall, wall linings](#)

[Metal suspended ceiling systems](#)

[Flooring – Brio and GIFA systems](#)

[Façades – Steel framing systems](#)

[Taping and jointing](#)

[AQUAPANEL® Indoor and Outdoor](#)

[Demountable ceiling systems](#)

[Drywall for site managers / Quality Control](#)

[Airless spray finishing](#)



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Website: [www.knauf.com](http://www.knauf.com)

## Offering the best possible results when bedding tapes and beads, as well as finishing joints.

### An introduction to Jointing

Our powdered and ready-mixed jointing ranges have been developed to give the best possible results and comply with BS EN 13963: 2014. They are the ideal choice when bedding tapes and beads, and finishing joints. Can be hand or machine applied. Knauf's jointing products give you a smooth finish and are easy to sand.

### System Performance Warranty – GPDA (Gypsum Products Development Association) Product Compatibility Statement

For the purposes of preparation for decoration, gypsum-based finishing products (e.g. jointing compounds and finishing plasters) can be applied to the front face of plasterboard manufactured in accordance with BS

EN 520 2004 A1+ 2009, provided the products are manufactured in accordance with the current, relevant standard, e.g. Finishing Plaster – BS EN 13279-1: 2008. Jointing Materials – BS EN 13963: 2014, except where:

1. colour matching is required between plasterboard and jointing.
2. required by the manufacturer, moisture resistant plasterboard variants need to be primed prior to plastering.
3. specific finishing materials are required by the system warranty provider to maintain or achieve the system performances, for example, fire resistance and acoustic insulation.



Knauf are pleased to be an FIS associate training provider. Contact us to find out more about the latest courses available.

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# Product selector

		Application			Bag Details				
		Bedding Coat	Finish Coat	Patching & Repair	Sizes available	Approx Coverage	Shelf Life		
Powdered	Accelerated Set Hand Applied		Knauf Fill & Finish 30 Premium A fast setting multipurpose gypsum-based compound for bedding tapes and beads as well as finishing. 30 minutes working time.	✓	✓	✓	10kg	45m <sup>2</sup>	9 months
			Knauf Fill & Finish 60 Premium A fast setting multi-purpose gypsum-based compound for bedding tapes and beads as well as finishing. 60 minutes working time.	✓	✓	✓	10kg	45m <sup>2</sup>	9 months
			Knauf Joint Filler Premium A fast-setting gypsum compound for bedding joints by hand application. 90 minutes working time.	✓	✗	✓	10kg 20kg	55m <sup>2</sup> 110m <sup>2</sup>	9 months
	Hand Applied		Knauf Joint Cement Premium A lightweight air-drying compound for bedding tapes and finishing joints by hand or machine application. Use over Knauf Joint Filler Premium.	✓	✓	✗	20kg	80m <sup>2</sup>	12 months
			Knauf Fill & Finish An easy-to-sand jointing compound for bedding tapes and finishing joints in drywall partitions and ceilings.	✓	✓	✓	20kg	30m <sup>2</sup>	12 months
Ready-mixed	Air-drying Hand / Machine Applied		Knauf Fill & Finish Light Lightweight ready-mixed compound for bedding tapes and finishing joints in drywall partitions and ceilings.	✓	✓	✓	5kg 20kg	11.25m <sup>2</sup> 45m <sup>2</sup>	12 months
			Knauf Wallboard Primer A surface treatment that equalises suction across joints prior to decoration. Applied with a brush or a roller.	N/A	N/A	N/A	12L	133m <sup>2</sup> per tub	9 months

# Why Knauf Jointing?

## ARCHITECT



### System Warranty

Premium quality finishes that are less prone to chips and cracks. Included in Knauf System Performance Warranty and Gypsum Products Development Association (GPDA) Product Compatibility Statement.

For more details see page 5.

## MAIN CONTRACTOR



### Responsible supplier

Knauf are committed to reducing our environmental impact, being a responsible business, and acting with future generations in mind.

## SUBCONTRACTOR



### Simplified construction

Ready-mixed compounds for ease of use, low shrinkage and crack resistant, making Knauf jointing products easy to use. Knauf also actively aid in future-proofing with our CITB approved training courses.






*'It mixes nice, it covers well and it's easy to apply.'*

Andrew Mansfield, AT Plastering



*'Being in close contact with our applicators on site results in an outstanding performance quality. Lump free easy mixing, soft but stable consistency, easy trowelling and easy, low dust sanding. Selected stuccos and fillers with an optimised particle distribution and tens of years' formulation experience are some of the secrets.'*

Dr. Claus Peter Berneth, Head of Competence Centre, Powder Compounds at Knauf

	Knauf Joint Filler Premium	Knauf Joint Cement Premium	Knauf Fill & Finish Premium	Knauf Fill & Finish	Knauf Fill & Finish Light
<b>Build up</b>					
<b>Application</b>	Bed and fill to shoulders	2 coat finish	Bed and fill to shoulders	2 coat finish	2 coat finish
	Hand applied	Hand or machine applied	Hand applied	Hand or machine applied	Hand or machine applied



### Bed and fill to shoulders:

1. Apply enough filler to bed jointing tape (minimum 1mm thick layer)
2. Embed reinforcing jointing tape
3. Re-apply filler to shoulders



### Two coat finish:

4. Apply first coat of finish to approximately 10" width
5. Apply second coat of finish to approximately 12" width

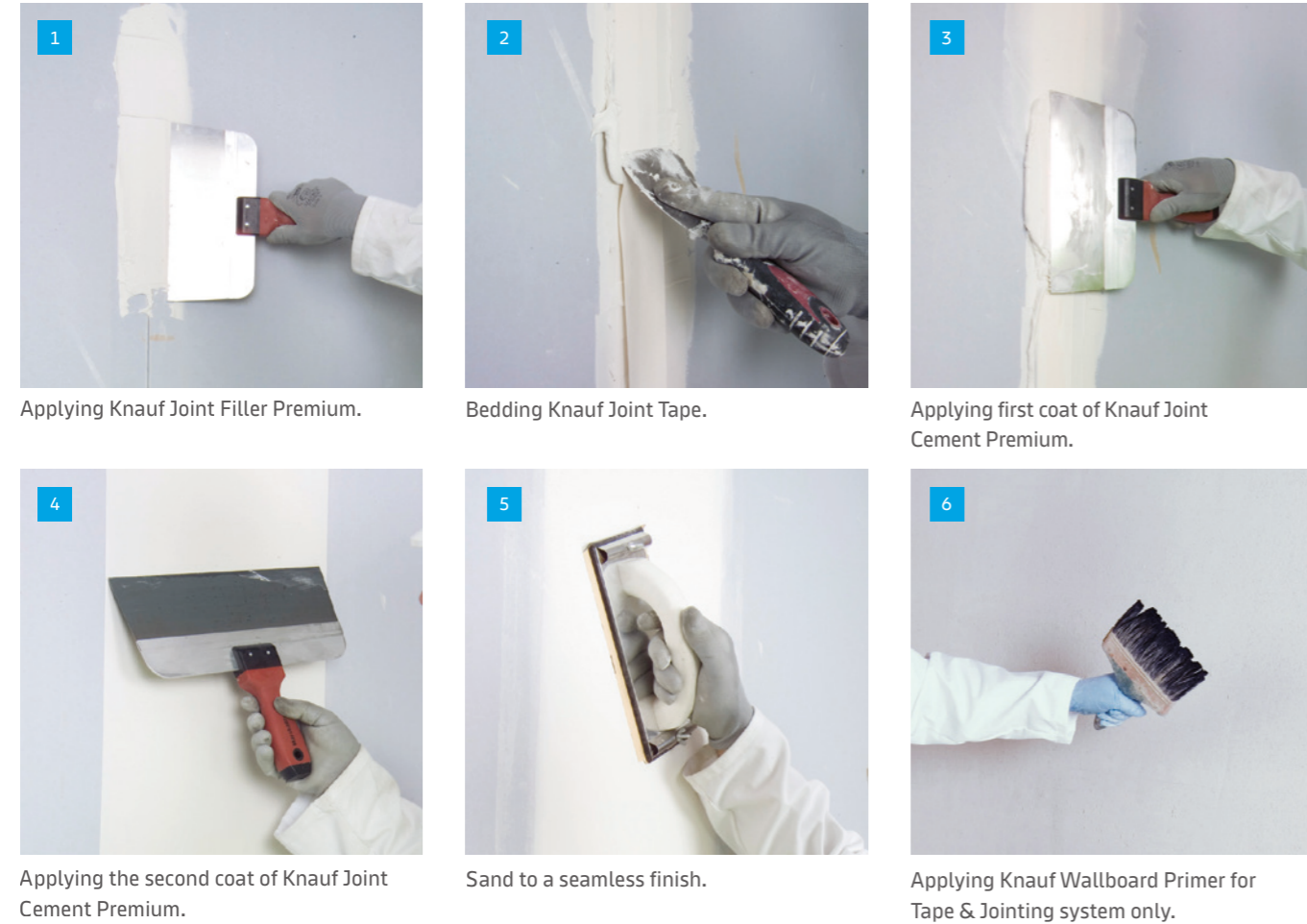
## Application method

### Jointing partitions for speed of application

Knauf's jointing materials and tapes are of the highest quality to ensure the best possible finish with the minimum risk of cracking.

For the fastest possible application time on vertical wall joints where no movement is expected, Knauf Joint Tape (paper) allows the filling and bedding processes to be completed in a single application. Always use tapered edge Knauf Plasterboards when specifying a tape and jointed finish.

*NB. Knauf only recommends the use of Knauf Joint Tape (paper).*



### Application method

**Step 1.** Apply Knauf Joint Tape (paper) to the length of the plasterboard joint.

**Step 2.** Apply a liberal coat of Knauf Joint Filler Premium over the tape, ensuring that the material is pushed through the tape to completely fill the joint, to a width of approximately 175mm (minimum filling to the shoulders). Smooth Knauf Joint Filler Premium and allow to set; this will take approximately two hours.

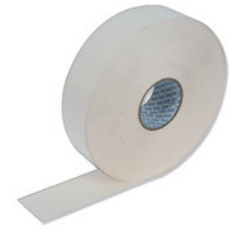
**Step 3.** Once the Knauf Joint Filler Premium has fully set, apply a coat of Knauf Joint Cement Premium or Knauf Fill & Finish Light over the entire layer to a width of approximately 250mm and leave to dry; usually overnight.



**System Performance Warranty**  
More details on page 5.

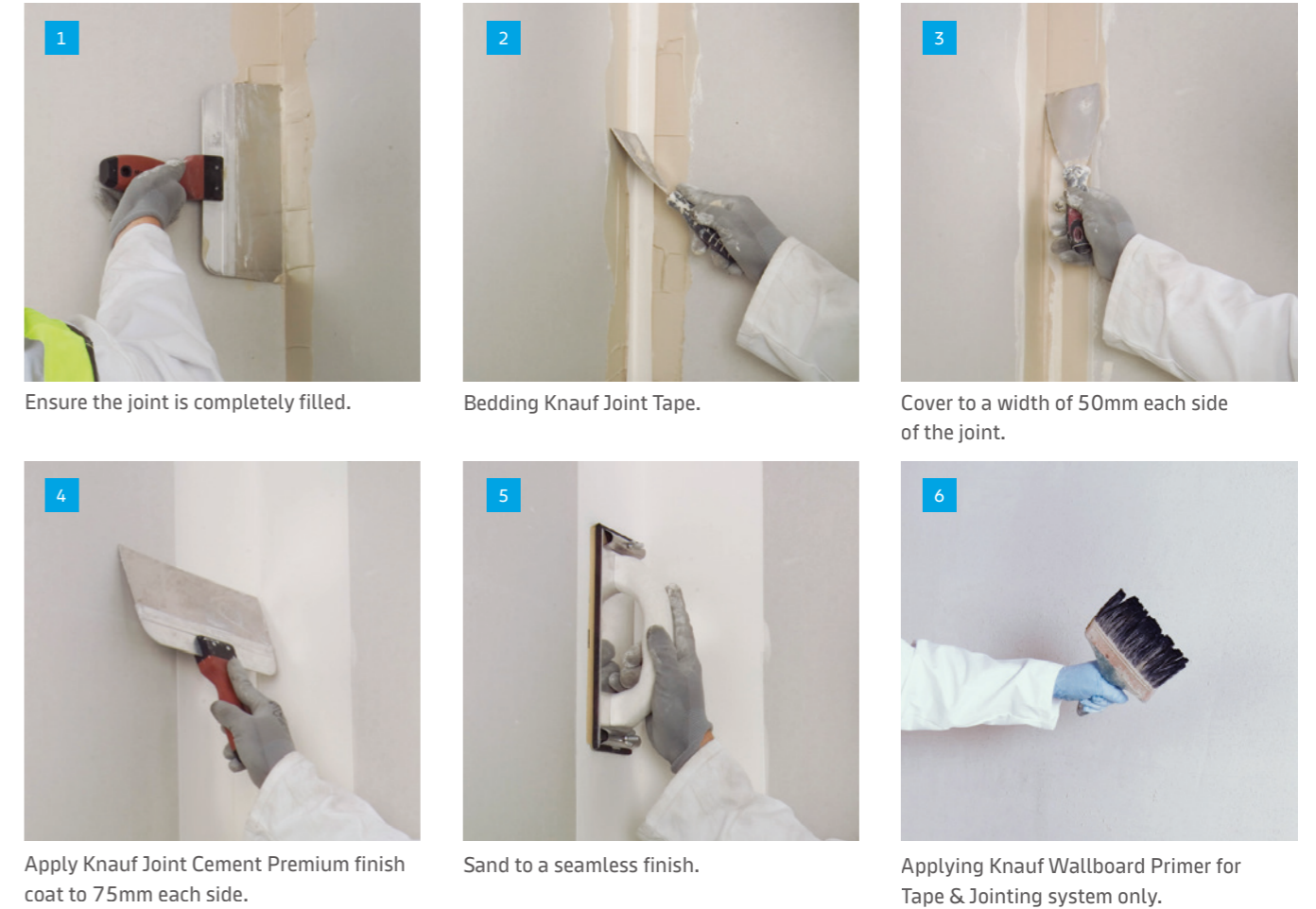
**Step 4, 5.** Once dry, apply the final coat of Knauf Joint Cement Premium or Knauf Fill & Finish Light to a width of approximately 300mm and leave to dry. Sand to a seamless finish using 150/180 grade sand paper.

**Step 6.** Prior to final decoration, the entire plasterboard surface should be coated with Knauf Wallboard Primer to ensure an even suction and subsequent even paint texture, across the whole surface.



### Jointing internal corners in partitions

Knauf Joint Tape (paper) has an indented centre line that makes it easy to fold for use with internal corners. Knauf's range of joint cements are often preferred for internal corners for their easy workability.



### Application method

**Step 1.** Fill the joint completely with either Knauf Joint Filler Premium, Knauf Joint Cement Premium, or Knauf Fill & Finish Light.

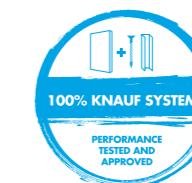
**Step 2, 3.** Fold the Knauf Joint Tape (paper) along the centre line to suit the internal corner, then bed into the material and cover to a width of approximately 50mm each side of the joint. If using Knauf Joint Filler Premium, allow it to set; this will take approximately two hours. If using a Knauf joint cement allow it to dry; this will nominally take 24 hours.

**Step 4.** Apply a finish coat of Knauf Joint Cement Premium or Knauf Fill & Finish Light over the entire layer

to a width of approximately 75mm each side of the joint and leave to dry; usually overnight.

**Step 5.** Once dry, sand to a seamless finish using 150/180 grade sand paper.

**Step 6.** Prior to final decoration, the entire plasterboard surface should be coated with Knauf Wallboard Primer to ensure an even suction, and subsequent even paint texture, across the whole surface.



**System Performance Warranty**  
More details on page 5.

## Application method

### Jointing external corners in partitions

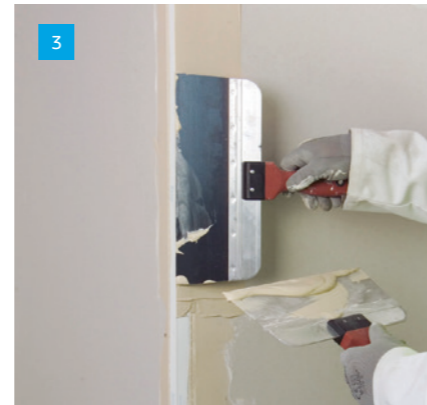
Knauf Corner Flex Tape is designed to protect the corner of the partition when used with Knauf Joint Filler Premium and has been proven to resist damage more effectively than traditional metal corner joint sections.



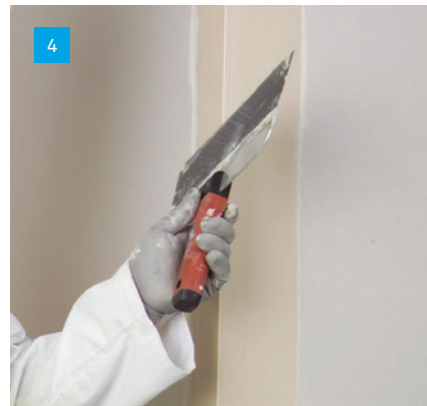
Applying Knauf Joint Filler Premium to either side of the corner.



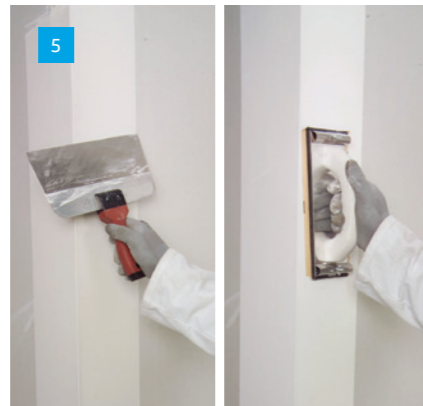
Ensure all holes are completely filled.



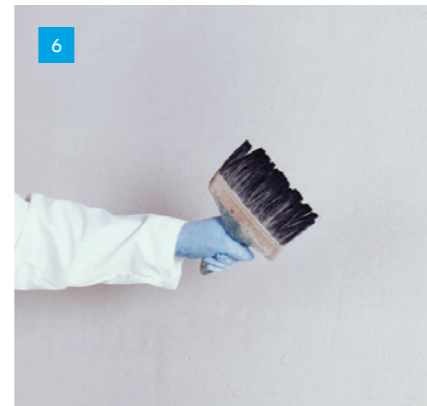
Applying the first layer of Knauf Joint Filler Premium.



Apply second coat to 175mm each side of the corner.



Applying the finish coat of Knauf Joint Cement Premium.



Sand to a seamless finish and apply Knauf Wallboard Primer for Tape & Jointing system only.

### Application method

**Step 1,2.** Apply a liberal coating of Knauf Joint Filler Premium to both sides of the corner along the length of the joint. Push the Knauf Corner Flex Tape onto the corner, over the Knauf Joint Filler Premium, ensuring that all the holes in the Knauf Corner Flex Tape are completely filled or use a corner roller if available.

**Step 3.** Apply a first layer of Knauf Joint Filler Premium over the edges of the Knauf Corner Flex Tape and feather out to approximately 175mm each side of the corner. Allow to set; this will take approximately two hours.

**Step 4.** Apply a second layer of Knauf Joint Filler Premium over the first layer, again feathering out to approximately 175mm each side of the corner. Allow to set; this will take approximately two hours.

**Step 5.** Once fully set, apply a finish coat of Knauf Joint Cement Premium or Knauf Fill & Finish Light feathered out to approximately 250mm each side of the corner and leave to dry. Sand to a seamless finish using 150/180 grade sand paper.

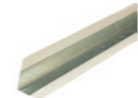



**Step 6.** Prior to final decoration, the entire plasterboard surface should be coated with Knauf Wallboard Primer to ensure an even suction, and subsequent even paint texture, across the whole surface.








**System Performance Warranty**  
More details on page 5.

## Finishing accessories

### Jointing Beads

Product name	Dimensions		
	Metal (mm)	Paper (mm)	Length (m)
 Knauf Dallas B1 External Bead	16 16	20.5 20.5	2.6 3.0
 Knauf Las Vegas B2 Internal Bead	9.5 9.5	16 16	2.6 3.0
 Knauf Drywall Angle Bead	25x25 25x25	- -	2.4 3.0
 Knauf Drywall Edge Bead	12.5 15	- -	3.0

### Jointing Tapes

Product name	Roll Size	
	Length (m)	Width (mm)
 Knauf Joint Tape (paper)	150	51
 Knauf Corner Flex Tape	30	62
 Knauf Fibre Tape	90	50
 Knauf Flexible Metal Tape	30.5	50
 Knauf Fibre-glass Tape	25	50



## Frequently asked questions

### Powdered Jointing

#### Can I spray apply your Premium Jointing range and similar products?

The accelerated setting products cannot be spray applied, but the air-drying options – Knauf Joint Cement Premium, Knauf Fill & Finish Ready-mixed and Knauf Airless Finish can be spray applied or used with jointing machines such as Bazookas or Banjos.

Please see the application methods for the Knauf Premium Jointing Range on pages 8–10.

#### What is the difference between Joint Filler Premium, and Joint Cement Premium?

Knauf Joint Filler Premium is an accelerated set product and only used for bedding tapes and fixing beads. It has a 90 minute set and is preferred on larger commercial projects, where cost and time is a factor.

Knauf Joint Cement Premium is an air-drying product which can be used for bedding and finishing joints, typically drying between 12 – 24 hours, subject to humidity and weather conditions. Preferred by smaller projects for snagging, patch repairing and is a product with enhanced workability.

#### Can I paint the surface or do you need a mist coat?

All jointed surfaces should be primed with Knauf Wallboard Primer before painting.

#### How long does the product take to install/drying time?

Air-drying products e.g. Knauf Fill & Finish, typically take 12–24 hours. For our accelerated set products, this varies according to the setting time.

### Ready-mixed Jointing

#### Why do you have two types of Fill & Finish Ready-mixed products?

“Blue top” and “Green top” as it’s fondly known in the marketplace.

Knauf Fill & Finish (Green top) is a medium density product. It is down to installer preference for the workability and its dexterity (20kg–30m<sup>2</sup>).

Knauf Fill & Finish Light (Blue top) is a lightweight density product giving you extra coverage from the tub size (20kg–45m<sup>2</sup>). Both give a superior quality finish.

#### How long does the product take to install/what is the drying time?

Air-drying products e.g. Knauf Fill & Finish/Fill & Finish Light, typically take 12–24 hours. For our accelerated set products, this varies and would be subject to humidity and weather conditions.

#### Can I paint the surface or do you need a mist coat?

Once the surface is dry and has been sanded ready for decoration, decorate with a mist coat of paint and two full coats of paint.

### Recycled Packaging

The construction industry has a huge plastic waste problem; plastic waste from the UK construction industry increased by almost 46% over 2 years, compared to a decrease of almost 3% from the UK in the same period according to DEFRA statistics\*. It isn’t practical to stop using plastic, but if we use recycled plastics we are cutting down on new materials entering our ecosystem and re-using what is already there.

With this in mind, Knauf is in process of changing its plastic packaging over to PCR plastics. These are post-

consumer recycled plastics – materials which have been used by consumers, recycled and given a new life.

In all of our jointing product packaging, at least 30% recycled plastic is used (excluding lids), and the packaging is also often recyclable at the end of its life so the circle can be continued.

The packaging is easy to recognise with new logo’s, and a grey rim and base (due to a number of different coloured plastics being used to make the new product). Look out for more of the Knauf portfolio changing over to recycled plastics soon.

\*ENV23 - UK statistics on waste - GOV.UK (www.gov.uk)



## Fill & Finish Range

Low Mess  
Low Shrinkage  
Low VOC\*

\*Total VOC 28 days <1mg/m<sup>3</sup>



See our Ready-Mixed products in action by scanning the QR code to watch our Ready-Mixed versus powdered jointing video

# KNAUF

**Build on us.**



## Case Study

### East Village, Stratford in London

**Project outline:** Two residential towers of 30 and 26 storeys, containing a total of 482 apartments.

**Products:** Knauf Fill & Finish, Knauf Joint Filler Premium, Knauf Airless Finish and Knauf Plasterboards.

**Summary:** A full Knauf system specification has been used on an award-winning housing development at East Village, Stratford that was a centrepiece for the 2012 London Olympics.

#### **Knauf's Ready-mixed Finishing Solutions support award-winning innovative housing development.**

A full Knauf system specification has been used on an award-winning housing development at East Village, Stratford that was a centrepiece for the 2012 London Olympics. Two residential towers of 30 and 26 storeys, containing a total of 482 apartments, have been constructed at the site.

Construction giant Mace, the main contractor appointed to work on the project, scooped two prizes at the 2018 Construction News Awards, held in London on 12th July 2018. The firm won 'Best Innovation' and the new 'Sir Michael Latham Award', sponsored by the Department for Business, Energy and Industrial Strategy (BEIS) and the Infrastructure and Projects Authority, for their unique new Rising Factory method.

The self-contained factory is constructed around the outside of the new building. Inside, the residential tower is constructed floor by floor and when one is completed, the factory is 'jumped' up 3.3m to the floor above to repeat the process, revealing the completed building below.

Main contractor Mace appointed subcontractors Conneely and AT Plastering to complete the drywall and plastering elements of the project and chose to use Knauf Fill & Finish, Knauf Joint Filler Premium, Knauf Airless Finish and Knauf Plasterboards as a full system specification in this high-profile project where speed was of the essence.

Dean Phillips of Conneely said: "I always use the full Knauf system for projects. Overall, using Knauf was a good experience from start to finish in East Village and I'd definitely use them again for my next project."

"A representative from Knauf always comes to visit us on site to provide assistance with the product application. They are able to provide us with clear, easy to understand information and I've not had any problems with using the full Knauf system specification."

Andrew Mansfield added: "It's also much easier to use compared to traditional plastering methods. The fact that it is pre-mixed is a big plus for us as normally you'd have to wait for around two weeks after plastering before painters can come on site.

Knauf Airless Finish only requires ventilation and a little bit of heat whereas traditional plaster requires all the moisture to be drawn out before paint can be applied. The spray plaster method allows us to expedite the whole process and helps reduce overall costs for projects due to the savings gained from reduced time and labour."

***"Normally for a project this size you'd need 30-40 plasterers, but using the Knauf system we only need 15 spray plasterers."***

*Andrew Mansfield, AT Plastering*

Manufactured from crushed and milled marble, together with polymer and organic binders, Knauf Ready-mixed Finishing Products eliminate the need for a direct water supply on site. The significant reduction in product wastage is achieved through the ability to recycle any excess plaster back into the hopper to be used again.

"It's definitely the way forward," says Andrew.

East Village is also at the centrepiece of a new report from Mace which has found that widespread adoption of modern methods of construction (MMC) could create a £40 billion export market for the UK. The rapid working times offered through using Knauf's Ready-mixed Finishing Solutions can boost productivity for contractors by using a modern and efficient method for plastering.

To discover more inspirational projects with Knauf products and systems, please visit our case studies section at [knauf.com](http://knauf.com)

# An introduction to Knauf Ready-mixed Airless Finish

The highly efficient alternative to traditional plaster for finishing walls and ceilings.

Providing an extremely efficient alternative to traditional plastering methods, the Knauf ready-mixed Airless Finish is quicker to install and provides a higher quality finish.

Traditional finishing methods have several drawbacks: speed of application; material waste; and inconsistent finishing quality. Knauf's spray-applied finishing solutions offer cost-effectiveness for the total finishing application.



# Not gypsum-based... What's in it then?



Manufactured from crushed marble, then mixed together with polymer and organic binders, Knauf Airless Finish is faster and easier to apply because there is no need for any pre-mixing, reducing the water needed on site, as only a small amount is needed to clean the airless piston pump.



*“The different Dolomite types used in our products are natural raw materials selected according to well defined quality standards. The particle size distribution is optimised to give the Knauf Airless products optimal spray-ability and the required ease of application once applied to the wall. Our airless formulation ensures the smoothest possible finish after drying.”*

Claudia van Sloun, Chemist at the Knauf Competence Centre

*“After trying out the Knauf Airless Finish for one of my projects, we wouldn't use anything else now it's so clean and fast to apply and a great finish.”*

Darren, D.M.H Interiors



## Knauf Airless spray finishing course at Knauf Learning Zones



*“I have been interested in learning how to plaster for some time, but I was worried it would make a pre-existing shoulder injury worse: I've heard lots of horror stories about the physical pain traditional plastering techniques can cause. However, when I learned about Knauf Airless I realised this might be something I could do.”*

Jennifer Gardner, CITB Airless Spray Finishing Course attendee

Sustaining through training, Knauf actively aid in future-proofing with our CITB approved Training Courses protecting the workforce and their health. Please visit the CITB website for the Levy Eligibility Calculator or contact a member of the Knauf Technical Team:

Telephone: **01795 424499**  
Email: [knauftraining@knauf.com](mailto:knauftraining@knauf.com)



## Product Selector

**Knauf Airless revolutionary technology is changing the way our customers and contractors approach smooth surfaces.**

Knauf Airless Finish offers a level 5 finish, with a quantifiable difference in post application snagging issues.



	Knauf Airless Finish
Substrate /purpose	Wallboard, smooth concrete and previously decorated surfaces.
Thickness (one layer)	1 – 2mm Prior to decoration.
Drying Time	12 – 24 h
Tip Size*	531 – 535
Sizes available	25kg
Coverage (1mm thickness)	Approximate consumption: 0.8-1.5kg/m <sup>2</sup> depending on thickness of application and substrate.
Finish	White
Shelf Life	12 months
Level of Finish	Level 5

\*Smaller tip sizes are recommended for the newer Graco machines (Vortex Pump). For more information please contact Knauf Technical Services.



# Why Knauf Airless Finish?

## Architect



### Reduced water added on site

Greatly improved water and waste management, less water added on site as well as across the product lifecycle, as shown in the Environmental Product Declaration (EPD).



### Economical

Can cover up to 250m<sup>2</sup> with 2 people, reducing the amount of time taken to finishes the walls when compared to traditional plaster which averages 80m<sup>2</sup> per day.



### Level 5 Finish

Whenever the client needs the smoothest of wall finishes they may ask for a level 5 finish cited in GA-214-10, of which the Knauf Airless range achieves with ease.



### Environmental

All packaging recyclable.



### BREEAM

Can contribute towards BREEAM credits. A1-A3 GWP is 0.0145 (per kg of ready-mixed product), and across its lifecycle is just 0.03% of the LETI embodied carbon limit target for schools and offices.



### System Warranty

Included in Knauf System Performance Warranty.



### Minimal Waste

Reduced water needed on site, only a small amount is needed to clean the airless piston pump and wastage is typically 1%.



### Improves Acoustic Performance

Airless Finish has been found to increase acoustic performance by up to 2dB when used in a Knauf system\*.

*Statistics based on 15.000m<sup>2</sup> project*

*\*Acoustic testing of Knauf Performer systems, with 2 coats of Airless Finish (2mm thickness after sanding) applied to both sides of the partition. Observed performance improvement of at least 1dB (Rw)*

## Main contractor



### Sustainability

Knauf Airless Finish contributes to sustainability targets with low embodied carbon (A1-A3 GWP per m<sup>2</sup> is only 0.016kg CO<sup>2</sup>e) and low water usage across its lifecycle as shown in the EPD.



### Fire Reaction

Knauf Airless is classified EN 13501 A2-s1, d0 for Fire.



### Technical Support

Sustaining through training, Knauf actively aid in future-proofing with our CITB approved training courses. Protecting the workplace and their health.



### Economical

Reduced application costs and greater productivity over traditional methods.



### 68 Hours Saved

Manual preparation alone, saved using Knauf Airless over traditional methods.



### Reduced Waste

Waste reduced to 1% if rollers used to squeeze the material from the bags. The bags also contain 30% recycled content.

*Statistics based on 15.000m<sup>2</sup> project*

## Subcontractor



### Up to 250m<sup>2</sup> per day

Coverage achieved using Knauf Airless range over traditional powdered methods based on two applicators.



### Health & Safety

Knauf Airless Finish contains very low VOCs, Total VOC 28 days <1mg/m<sup>3</sup>.



### Cost vs Longevity

Outlay for machine hire or purchase versus time saving and manual handling. Enabling availability for more projects, increasing the rate of payback.



### Safer Method

"60% of injuries to muscles, tendons, ligaments and joints affected the trunk, and 36% of trunk injuries resulted from overexertion in lifting" (HSE 2001). Knauf Airless Finishes are less taxing than traditional methods and can reduce working at height issues.



### Easier Clean-up

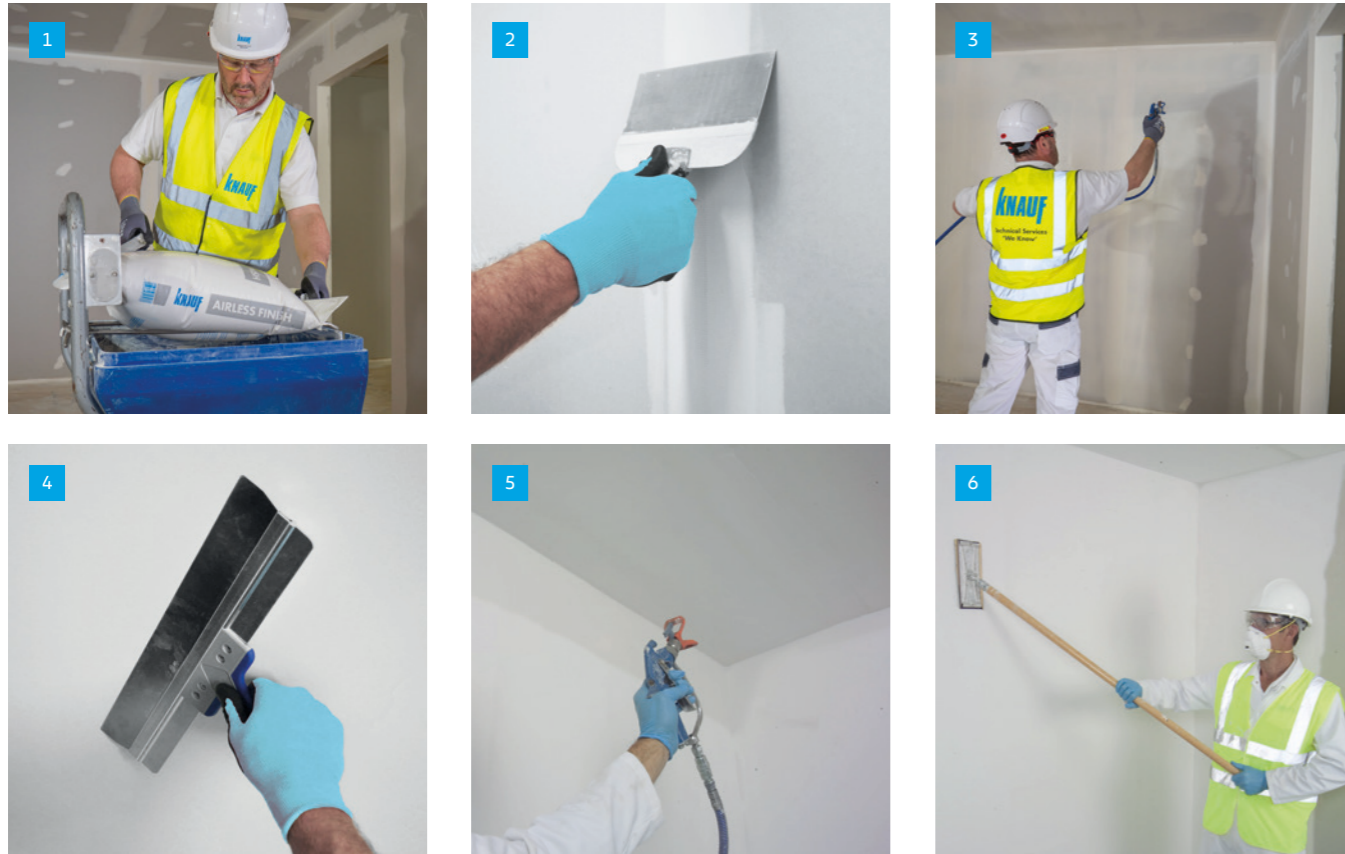
Clean up time is reduced compared to traditional powdered methods, less contaminated water, and waste to dispose of.



### Reduced working from height

Airless can be sprayed up to 3m high by the applicator standing on the floor. This reduces the need for additional equipment to finish ceilings and walls versus traditional methods.

## Application method



### Remedial or refurbishment for walls and ceilings

Ensure background is free from dust and grease.

#### Step 1. Machine setup

Empty Knauf Airless Finish into the hopper of the spray machine or tub. When opening the bags always cut the handle end of the bag and squeeze through the rollers. Cutting other way around makes plastic/material block the spraying tip.

#### Step 2. Preparation of joint

Hand or machine-apply the joints with Knauf Fill & Finish Light or Knauf Joint Filler Premium. Bed the joint tape into the joint and level off, ensuring the tapes are filled to the shoulder of the taper; fill out the screw heads. Bed paper-faced metal beads/flex tape to all internal/external corners. Allow to stiffen. Typically, Knauf Fill & Finish Light or Knauf Joint Filler Premium requires 12–24 hours, dependent on adequate ventilation.

#### Step 3. Application to substrate

Apply an even first coat of Knauf Airless Finish to the walls and ceilings, ensuring an even coverage of material to the surface.

#### Step 4. Finishing

Level flat with a levelling tool (spatula/trowel). After 10 minutes, finish internal/external angles with a corner trowel. Any material removed in the levelling process can be recycled into the hopper/tub. Allow to dry. This will typically take 12–24 hours. Ensure good ventilation to reduce air humidity and accelerate drying.

#### Step 5, 6. Second layer and Finishing

Apply the second coat of Knauf Airless Finish and repeat the process from the first coat, but this time applying more pressure to flatten the surface. Allow to dry. This typically takes 12–24 hours. Ensure good ventilation to reduce air humidity and accelerate drying.

Check the surface of the walls and ceilings, and sand away any high spots with 180 grade sandpaper. If using a drywall sander with a vacuum attached, use 220 grade sandpaper. Allow 24 hours before commencing decoration. The use of tapered-edge Knauf Plasterboard will provide the best results.

## How does Knauf Airless Finish help meet sustainability goals?



As well as being quick and easy to apply, Knauf Airless also helps towards sustainability goals in many ways.

Knauf Airless Finish has a Total VOC after 28 days of <math><1\text{mg}/\text{m}^3</math>, this means that there are almost no VOC's emitted by the product. Volatile Organic Compounds (VOC's) are emitted into the environment by everyday building materials, paints, furniture and cleaning products which have been linked to both short term problems such as eye, nose and throat irritation, as well as longer term issues such as allergies, asthma and even cancer.



The fine dust emitted from powdered products is called respirable crystalline silica (RCS\*\*), which when breathed in over many years can cause Silicosis, COPD and lung cancer if not adequately controlled (HSE). As Knauf Airless is ready-mixed, and not made from traditional gypsum plaster, the benefits for the applicators are that there is trace silica.

Another benefit of being ready-mixed, is that the product does not need water to be added when mixing, just a small amount to prime and clean the machine. While also being a convenience, this means reduced environmental impact, which can be seen across the product lifecycle in the EPD.

\*[hse.gov.uk/aboutus/occupational-disease/cancer/silica.htm](https://www.hse.gov.uk/aboutus/occupational-disease/cancer/silica.htm)

\*\*Musculoskeletal problems in bricklayers, carpenters and plasterers: Literature review and results of site visits - HSL/2001/13 - [hse.gov.uk](https://www.hse.gov.uk)

Clean-up is even easier – the bag is recyclable and the Airless system means that the product is squeezed from the bag through the roller of the airless piston pump machine, meaning very little wastage and a quick and easy clean up. Any leftover material in the hopper can be kept for the next day.

With a shelf life of 12 months, the product stays fresh while unopened for an extended period, reducing wastage.

A wellbeing benefit for the applicator is less strain, traditional gypsum plastering is a manually intensive job which can cause physical strain; a HSE report looking at plasterers found that construction is a high risk industry for musculoskeletal disorders\*\*, but using an airless piston pump is a lot less demanding on the body.

Working at height is reduced; ceilings can be sprayed from floor level and smoothed with a spatula on an extension pole, so the need for ladders and step-ups is reduced.



## Frequently asked questions

### Does Knauf Airless Finish have Health, Environmental and Quality policies?

Knauf UK has Environmental and Sustainability policies which are available on our website, and our UK production and distribution facilities are ISO 9001, ISO 14001, and ISO 45001 certified.

There is also minimal risk for working at height, vastly improved water, waste and time management compared to traditional methods.

### Why such a thin coat application?

You do not need the same thickness to obtain the same performance characteristics. We add polymer and organic binders so the performance characteristics are different to gypsum-based plaster.

Minimum depth is 1.5mm typically 2mm after full application, compared to 2–3mm for gypsum-based products.

### Can you hand apply Airless finish?

Yes, Knauf Airless Finish can be hand applied. For the best finish and coverage rate, we advise you spray apply. When hand applied the coverage is less accurate.

### What type of machine is used to apply Knauf Airless Finish?

High pressure piston pump machine, most commonly Graco Mk 5 or Graco APX 600.

### How long does the product take to install/what is the drying time?

Air-drying products e.g. Knauf Airless Finish, typically take 12–24 hours. For our accelerated set products, this varies upon the setting time.

### Can you spray already plastered walls? Should a primer be used?

Yes, you can spray previously decorated walls with no primer needed. A small test area should always be completed first.

### Do you need a base coat for application on brick/block?

Knauf Airless Finish may be used on smooth concrete (in addition to plasterboard), but for other surfaces please contact Knauf Technical for more information.

If you have any further questions, please contact a member of our Technical Team.

Telephone: **01795 424499**

Monday to Friday (except public holidays) 09:00-17:00

Email: [technical-uk@knauf.com](mailto:technical-uk@knauf.com)



# Build on us.



## Knauf Airless Finish

- Up to 3 times faster than traditional methods
- Reduced water on site and easier clean-up\*
- High productivity: 200–250m<sup>2</sup> per day with 2 people
- Contact [Knauftraining@knauf.com](mailto:Knauftraining@knauf.com) to arrange a training session or demo

*\*Compared to traditional gypsum plaster where water is needed on site for mixing. Leftover Airless Finish is contained within the hopper for the next day, and the empty bag is recyclable.*



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Top Tips video

# KNAUF



## Case Study

### Macmillan Cancer Center, Northallerton, Yorkshire

**Project outline:** A spacious complex with Knauf Airless Finish covering more than 7000m<sup>2</sup>.

**Products:** Knauf Airless Finish.

**Summary:** Knauf Airless Finish was specified on a project led by construction giant Interserve to build a new care centre for Macmillan Cancer Support and South Tees Hospital NHS Foundation Trust in Northallerton, Yorkshire.

#### Knauf Airless Finish wows at new Sir Robert Ogden Cancer Centre.

Knauf Airless Finish was specified on a project led by construction giant Interserve to build a new care centre for Macmillan Cancer Support and South Tees Hospital NHS Foundation Trust in Northallerton, Yorkshire. For such a well-known client, it was important to design the building with the end user in mind – in this case it would have to be somewhere that would feel calming for visitors experiencing an incredibly challenging time in their lives.

The new building showcases some striking architectural features, such as curved walls and fibreglass finishes. Martin Anderson from P+HS Architects explained: “We’ve been working on this project for several years now, taking the time to ensure this will be a truly exceptional building.”

Another plastering product was initially specified at the outset; however, subcontractors Dual Interiors Ltd requested the specification be changed to Knauf Airless Finish. Joe Graham, Manager at Dual Interiors Ltd explained: “We looked at the different options available and decided using Knauf was the most cost-effective option for this project as well as producing a very high-quality end result as opposed to traditional plastering methods.”

**“It provides better quality by a mile and it’s saved us a lot of time when it comes to snagging issues. After mist coating, this product produces a snag free quality finish first time.”**

*John Graha, Site Manager/Owner Dual Interiors Ltd*

Architect Martin commented: “Although the original specification was changed, we didn’t have a problem with this as we were already familiar with Knauf and the quality of their products. We hadn’t used this specific product before however we were very excited to see the end result.”

Additional savings can be achieved as the need for both a mist coat and a first coat finish is eliminated.

The product performs especially well with high specification paints such as vinyl silks as there is no flash through of joints on finished walls even where there is large areas of glazing on very light sunny days.

The product requires very little water added on site. It does not cause over-spray unlike traditional spray plaster products – in all it is a very clean and easy product to use.

“Interserve management has been very impressed with the exceptional quality of finish and proposed use of the product on future projects because of its environmental credentials and ease of use. On the whole it’s definitely much better than other products we’ve tried.”

Knauf Airless Finish has been specifically developed by Knauf’s Research and Development team who actively searched for an innovative way to improve the working conditions of plasterers using their products. Created with plasterers in mind, it is designed to take the hassle out of plastering and is ideal for improving efficiency on larger projects.

The productivity benefits of spray-applied plaster are most prevalent where there is a lot of repetitive plasterwork required.

The product is supplied on-site as a pre-mixed liquid product, free from dust and ready to be used straight away. The liquid form eliminates the need for a direct water supply on site and reduces product waste as any unused product can simply be placed back into the hopper.

Unlike other products, Knauf Airless Finish has a drying time of 12–24 hours and requires only little heat and ventilation. Traditional plaster methods tend to require all the moisture to be drawn out first before paint can be applied, which can take up to two weeks.

Knauf Airless Finish is applied using a spray plaster machine and hopper. At the Sir Robert Ogden Cancer Centre in Northallerton, Dual Interiors Ltd used a machine loaned from Knauf’s distributor Nevill Long however they are looking to procure a machine themselves for the next time they use Knauf Airless Finish.

To discover more inspirational projects with Knauf products and systems, please visit our Case Study section at [knauf.com](http://knauf.com)

# Look to the future – Build on us

**For nearly ninety years, Knauf has remained relentless, responsible and forward-looking in its pursuit of excellence.**

We have grown our reputation through making sure we focus on the environments in which our products are employed – working together to develop the solutions our customers seek; challenging preconceptions of what is possible and always open to new ideas.

We recognise the importance of the buildings in which we all live, work and relax. We spend 90% of our lives inside buildings, so it is of the utmost importance that the homes we live in, the hospitals where we care for our sick, the schools in which we educate our children and the offices in which business operates are world class, safe, comfortable, sustainable and enjoyable.

The extensive portfolio of products and systems from Knauf UK & Ireland is developed to support that vision.

As a business, we look to the future; building on the knowledge we have acquired with a planned programme of research and development to make sure we continue to keep ahead of current thinking. Experimenting, testing new solutions and working ever more closely with our partners at every stage of a building project: the designers, distributors, contractors and users to make sure the developments we work on are genuinely innovative, relevant and progressive.

Looking to the future also means that our business must be sustainable. We are always conscious of the wider consequences of our actions, both today and tomorrow. In terms of our operation we work hard to minimise our impact on the environment and are proud of our recycling, waste reduction and energy efficiency initiatives.

Furthermore, we recognise that our business is only successful if the people who work within it are supported, encouraged and inspired. Our employee development programmes ensure that every individual is offered the opportunity to learn and progress both professionally and personally. The result is an exceptional team.

Technical expertise is the foundation of our business, but this has to operate hand-in-hand with a secure focus on our customers. We work hard to ensure that our support, service and customer relations functions are responsive, accommodating and resourceful. We proactively seek feedback at every opportunity, ensuring our customers have a fast and easy route to pass on comments and suggestions which are then used to inform further development.



Healthcare



Education



Residential



Commercial





### Customer Service

UK Tel: 0800 521 050  
Eire Tel: 01 4620739  
Email: [cservice@knauf.co.uk](mailto:cservice@knauf.co.uk)

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