



## INTERIOR FINISHING SOLUTIONS

FASTER, CLEANER, SUPERIOR FINISHES EVERY TIME

for hire. 03457450000

Vale we Pations

#### Premium quality finishes with minimum effort

Airless Ready-mixed Finishes

Premium Powdered Jointing

**Ready-mixed Jointing** 

Tapes, Beads and Accessories

Build for the world we live in

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 premixed spray finishes as a convenient and sustainable alternative to traditional plasters.

Knauf Finishing Solutions are included within a full system warranty.

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## CITB ACCREDITED TRAINING ORGANISATION



**ASSOCIATE MEMBER** 

## 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 build for the world we live in.

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 it. 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.

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

Telephone: 01795 424499 Email: training@knauf.co.uk Website: www.knauf.co.uk

#### Courses available

Airless spray finishing
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
Renders and external wall insulation (EWI)
Passive fire protection
Demountable ceiling systems
Drywall for site managers / Quality Control

#### 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.





## **PRODUCT SELECTOR**

					Application			Bag Details		
					Bedding Coat	Finish Coat	Patching and Repair	Sizes available	Coverage	Shelf Life
			in the second se	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.	s	s	s	10kg	45m²	9 months
Powdered	Accelerated Set	Hand Applied		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.	V	s	s	10kg	45m²	9 months
Pow			ing overesses	Knauf Joint Filler Premium A fast-setting gypsum compound for bedding joints by hand application. 90 minutes working time.	5	X	s	10kg 20kg	55m² 110m²	9 months
		pe	kun merenser	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.	V	s	X	20kg	80m²	12 months
Ready-mixed	Air-drying	Hand / Machine Applied	Lixay Fill & HINISH	Knauf Fill & Finish An easy-to-sand jointing compound for bedding tapes and finishing joints in drywall partitions and ceilings.	J	V	1	20kg	30m²	12 months
Ready-			Fills a FINISH The Constant The Constant The Constant The Constant	Knauf Fill & Finish Light Lightweight ready-mixed compound for bedding tapes and finishing joints in drywall partitions and ceilings.	\$	J	s	5kg 20kg	11.25m² 45m²	12 months
			P	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	12 L	133m² per tub	9 months
			LITTADOARD HIT	Knauf Plasterboard Sealer Used for sealing plasterboard and new walls for painting, preventing an uneven finish when decorating.	N/A	N/A	N/A	5 L	65m² per tub	12 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



Sustainably sourced where less product goes further. Ultimately reducing the amount of resource needed, with a positive impact on water, packaging, pallets, transport, fuel, time, man hours and as a responsible manufacturer we consciously look to reduce our carbon emissions.

#### SUBCONTRACTOR



Simplified construction

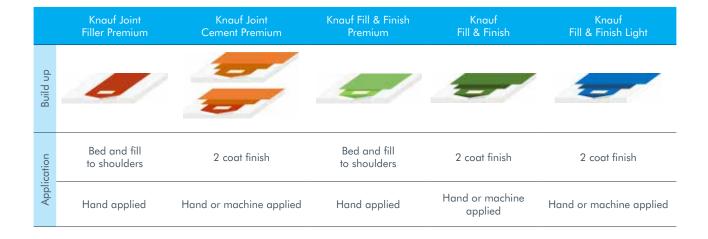
Ready-mixed compounds for ease of use, low shrinkage and crack resistant, making Knauf jointing products easy to use. Knauf also actively aid in future-proofing with our CITB approved training courses.

'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





#### **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



#### 2 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.





Applying Knauf Joint Filler Premium.



Bedding Knauf Joint Tape.



Applying first coat of Knauf Joint Cement Premium.



Applying the second coat of Knauf Joint Cement Premium.



Sand to a seamless finish.



Applying Knauf Wallboard Primer for Tape & Jointing system only.

#### **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. **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.



#### System Performance Warranty

More details on page 5.



#### 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.





Ensure the joint is completely filled.

4



Bedding Knauf Joint Tape.



Cover to a width of 50mm each side of the joint.



Apply Knauf Joint Cement Premium finish coat to 75mm each side.



Sand to a seamless finish.



Applying Knauf Wallboard Primer for Tape & Jointing system only.

#### **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.



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



Ensure all holes are completely filled.



Applying the finish coat of Knauf Joint Cement Premium.



Applying the first layer of Knauf Joint Filler 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

			Dimensions	
Product name		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
FEB CONSTRAINTS	Knauf Drywall Edge Bead	12.5 15	-	3.0

### Jointing Tapes

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



## FAQS

#### **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 range 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.

#### **Ready-mixed Jointing**

#### Why do you have two types of Fill & Finish Readymixed 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.

#### **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. 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.

## 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.

At least 30% recycled plastic is used, 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.

#### Project data

#### Project:

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:

HARD

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.

## CASE STUDY – EAST VILLAGE, STRATFORD IN LONDON

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 from AT Plastering agreed. "Normally for a project this size you'd need 30–40 plasterers, but using the Knauf system we only need 15 spray plasterers.". There is also no need to have the typical 6–8 labourers to clear up wastage as using Knauf Airless Finish means there is almost zero waste."

He 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."

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 Project Showcase at **www.knauf.co.uk**.



We are part of everyday life & the wider world.



We care about our impact on the environment.



Our products & systems are used to build homes, hospitals, schools, offices and airports.



## EASY CLEAN-UP EASY SANDING EASY APPLICATION

NAUF

ng and finishing co

kg

FILL & FINISH

- mody-f

**KNAUF Fill & Finish Light** 

ng and finishing compour

20 kg

**FILL & FINISH** 

LIGHT

**KNAUF** 

KNAUF Fill & Finish

Low Mess Low SHRINKAGE Low VOC

SEE OUR READY-MIXED PRODUCTS IN ACTION BY SCANNING THE QR CODE TO WATCH OUR READY-MIXED VERSUS POWDERED JOINTING VIDEO



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## AN INTRODUCTION TO KNAUF AIRLESS READY-MIXED FINISHES

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

The popularity of the spray method of plaster finish application has never been higher, giving Knauf a great opportunity to reach new customers in the drywall, plastering and decorating industry. Providing an extremely efficient alternative to traditional plastering methods, the Knauf Airless Ready-mixed Finishes are quicker to install and provide a higher quality finish. Traditional finishing methods have several drawbacks: speed of application; material waste; and inconsistent finishing quality. Spray-applied finishing solutions tick many boxes in terms of sustainability, but also in terms of 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 products are faster and easier to apply because there is no need for any pre-mixing, eliminating the need for a direct water supply on site.





'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

#### 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:

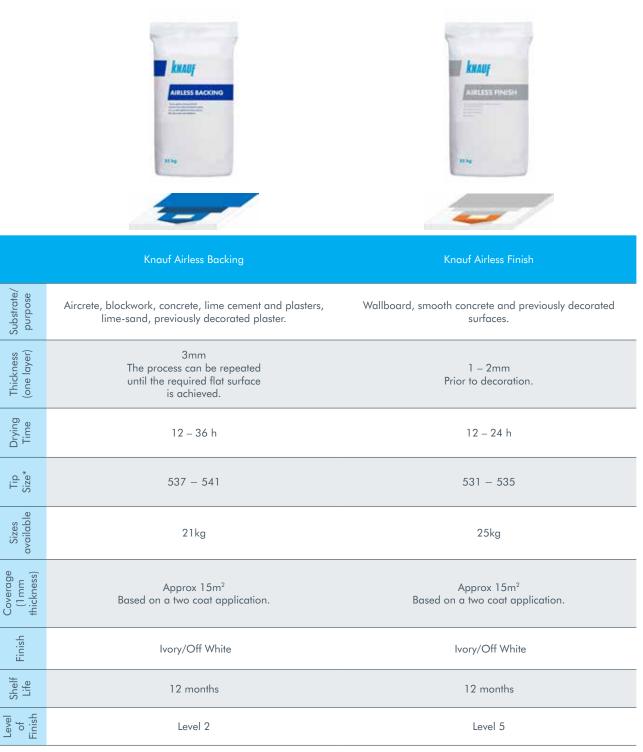
Telephone: 01795 424499 Email: training@knauf.co.uk



## **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. Review our Airless products to find the right solution and understand the benefits.



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

## WHY KNAUF AIRLESS?

#### ARCHITECT



1.2 Litres of water saved per  $m^2$ 

Greatly improved water and waste management.



Economical

Up to 9% cost saving per m<sup>2</sup> for supply, fit and labour. Coverage of 225m<sup>2</sup> compared to traditional plastering at 80m<sup>2</sup> daily average.



#### Sustainable

Sustainably sourced where less product goes further. Ultimately reduces the amount of resource needed, impacting water, packaging, pallets, transport, fuel, time, labour and as a responsible manufacturer we consciously look to reduce our carbon emissions. EPD available on our website.



#### 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.

#### MAIN CONTRACTOR



#### **Moisture Control**

ess water improves building moisture control.



#### Environmental

Trace Silica, no chemical binders or bonding agents added. All packaging recyclable.



#### 1.2 Litres of water saved per $m^2$

Greatly improved water and waste management. All packaging recyclable.



#### Technical Support

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

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



#### Environmental

Trace Silica, no chemical binders or bonding agents added. All packaging recyclable.



#### Moisture Control

Less water improves building moisture control.



Contributes towards BREEAM scoring.



System Warranty

Elite finish that is less prone to chips and cracks. Included in Knauf System Performance Warranty.



Minimal Waste

No water supply is required on-site and wastage is less than 1%.



#### Improves Acoustic Performance

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



#### Fire Reaction

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



### Economical

Reduced application costs and greater productivity over traditional methods.



#### 68 Hours Saved

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



**Quality Raw Materials** 

Knauf only source raw materials of pristine properties.

\*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)

#### SUBCONTRACTOR



Health & Safety

Knauf Airless range contains trace Silica. "Dust & Silica inhalation causes 500 deaths of construction workers every year" (CPD September 2014).



#### 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.



"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.

## Extra 25 – 31.25m<sup>2</sup> every hour

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



With gypsum-based plasters snagging can often run 3 to 4 times higher than the budgeted cost. Knauf Airless provides a much more consistent, flat finish minimising snagging, aiding with sequencing and achieving budget.



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

#### Want to know what to use and how much?

We make it easy! Download our

## **KNAUF FINISHING SOLUTIONS APP**

with instructional videos, coverage calculator and surface simulator.







## **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 or Knauf Airless Backing depending on the substrate being applied to, 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.

## WHAT MAKES KNAUF AIRLESS THE MORE SUSTAINABLE OPTION?

As well as being quick and easy to apply, Knauf Airless is also a sustainable option in many ways. It has a VOC content of < 0.1% (<1g/L), which 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. While also being a convenience, this means a huge environmental saving, from approximately 0.5 litres of water being added to every kilogram of traditional powder plaster.

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.

The long shelf life of 12 months means that the product will remain fresh unopened for a long time, so less wastage there too.

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.



\*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 (www.hse.gov.uk)



## **FREQUENTLY ASKED QUESTIONS**

Do all of your Knauf Airless finishing products have Health, Environmental and Quality policies? Knauf has Environmental and Sustainability policies

to ensure our products and systems do no harm to the world we live in.

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, the entire Knauf Airless range 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 Ready-mixed Finishes?

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.

#### Knauf Airless application time: 25–31.25m<sup>2</sup>/h. 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?

Yes, we suggest Knauf Airless Backing and Knauf Airless Finish for that type of substrate.

If you have any further questions, please contact a member of our Technical Team. Webchat available on **www.knauf.co.uk**, Monday to Friday (except public holidays) 09:00-17:00 Email: technical-uk@knauf.com





#### chnical Services 'We Know

## KNAUF AIRLESS FINISH

Up to 3 times faster than traditional methods

Reduced water and easier clean-up

## High productivity: 200-250m<sup>2</sup> per day with 2 people

Contact training@knauf.co.uk to arrange a training session or demo

SCAN HERE TO WATCH OUR TOP TIPS VIDEO



## THE TRUE COST OF SNAGGING

#### Snagging costs with gypsum-based finishes often run up to 4 times the initial snagging budget.



- the budgeted cost
  the site visits

## • the damage to your reputation

A contractor typically allows the below numbers for snagging when using a gypsum-based finish, but often the figures run higher than budgeted:

Budgeted average snagging cost	Actual average snagging cost		
Care home bedroom £50	Care home bedroom £400		
House or Apartment £150	House or Apartment £550		

The Knauf Airless range demonstrates a quantifiable difference in post application snagging issues. Airless products are the economical choice as well as impacting the labour efficiency, reputation and productivity of your business or brand.

	Traditional Gypsum	Airless	Saves	
Supply & Fit	£ 8.50 – 10.00/m <sup>2</sup>	$\pounds$ 7.50 – 8.50/m <sup>2</sup>	$\pounds 1.00 - 1.50/m^2$	
Labour only	$\pounds 4.00 - 5.50/m^2$	$\pounds 3.75 - 4.75/m^2$	$\pounds 0.25 - 0.75/m^2$	
Materials	Multi-finish £ 0.88/m² Waste £ 0.12/m² Water: 11.5 ltr/m²	Airless Finish: £1.10/m² Waste: £ 0.01/m² Water: 0.5 ltr/m²	Gypsum-based: -£ 0.18/m² Waste: £ 0.07/m² Water: 11 ltr/m²	
Productivity	60 – 100m² per day messy, dusty, high recycling costs	200 – 250m² per day clean, fast, improved costs & H&S, no trace Silica	140 – 150m² per day Time, cleanliness, wellbeing	
Bags required	500 mixes/(60 minutes) of 3 bags = 1500 bags	5 bag load per hopper 937.5 gives 187.5 mixes/ (60 minutes)	562.5 (Potential extra coverage gained during saved mixing time 1,700–2,125m <sup>2</sup> )	
Time taken each mix/opening (min)	10	5	5	
Time spent mixing (h)	83	15.6	67	
Water required (L)	17,250	6,562.5	10,687.5	
Wastage allowance (L)	1,725	65.6	1,659.4	
Total water required (L)	18,975	6,628.1	12,356.9	

Statistics based on 15,000m<sup>2</sup> project. Labour, supply & fit figures based on London and South East, Winter 2021/2022.

#### Project data

Project: Macmillan Cancer Centre, Northallerton, Yorkshire.

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

Products: Knauf Airless Finish.

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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.

## CASE STUDY – MACMILLAN CANCER CENTER, NORTHALLERTON, YORKSHIRE

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

Knauf Airless Finish, part of the Knauf Ready-mixed Finishes range (RMF) 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, part of the RMF range. 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."

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."

Knauf Airless Finish was used throughout the building in an area covering more than 7000m<sup>2</sup>. Site Manager/ Owner John Graham at Dual Interiors Ltd said: "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."

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 is highly sustainable as it requires no water. 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."

The Knauf RMF range, which includes 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. For every 27 minutes of work, contractors are getting an extra 100m<sup>2</sup> of productivity.

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 Project Showcase at www.knauf.co.uk.

## KNAUF CLERKENWELL SHOWROOM

Clerkenwell is a hub for design innovation and progressive architecture. It is the largest concentration of practices, showrooms and support services in the UK. Knauf is actively moving into the concept design phase of the project process.

Imagine – a bespoke same day service to the community where your perception is challenged and you can truly discover the possibilities of Knauf products and systems.

Knauf Clerkenwell is a destination for inspiration, learning and collaborative working with the Architect & Design community. The opportunity to talk through a project or design, and being provided a solution even before plans are drawn up.

Our products are used in all parts of the showroom and meeting spaces – from the flooring, to ceilings, wall linings and partitions.

Come and discover the possibilities of Knauf products and systems.

#### Visit us to:

- Take a look at the stunning installations to influence your project designs
- Speak to our Project Specification Managers who can help with design and technical advice
- Book a meeting room (available for our existing architect partners only)

#### **Knauf Showroom**

Location: 20 Baltic St E, London EC1Y OUL

**Opening times**: Monday – Friday 9.30am – 5.30pm





## HERE AT KNAUF, WE BUILD FOR THE WORLD WE LIVE IN

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.

There is always more to do. Every business must continually improve to keep ahead. We are constantly evolving to meet new challenges and capitalise on new opportunities while never losing sight of our ultimate goal: to Build for the world we live in. Now, tomorrow and for the future.



Education







Healthcare

Commercial



Residential



# **knauf**

**Customer Service** 

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#### **Technical Service**

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#### **SOCIAL MEDIA**









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