

COMPOUNDS PRODUCTS AND APPLICATIONS

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INTRODUCTION

Today Knauf is one of the world's leading manufacturers of modern insulation materials, drylining systems, plasters and accessories, thermal insulation composite systems, floor screed, floor systems, and construction equipment and tools. With more than 300 production facilities and sales organisations in over 90 countries, 40,000 employees worldwide, and sales of 12.6 billion Euro, the Knauf Group is, without doubt, one of the big players on the market – in Europe, the USA, South America, Russia, Asia, Africa and Australia.

At Knauf, we believe the best innovations start with a purpose – a focus on why the innovation is needed and who will benefit from it. Our focus is to deliver innovations that help you work smarter, do more and build better. Through an ever-growing portfolio of groundbreaking products backed by unparalleled service, we empower our customers to grow their business, much the same way you build cities and communities the world over. We do so by investing in purposeful innovation, expanding into different markets and constantly searching for new ways to increase performance and productivity.

This commitment to innovation and focus on you, our customer, is inspired by a desire to enable architects, contractors and workers alike to improve the way we live by changing the way buildings are designed and built.

At Knauf, we are committed to delivering only the best to you – our customers and partners. For more information on Knauf refer to **knaufapac.com**

Compounds

Knauf manufactures and supplies an extensive range of high-quality and consistent products including joint compounds, adhesives and plasters to suit all types of applications. These range from adhering plasterboard to timber or metal studs, plasterboard jointing to fixing cornices.

For easy reference, we have put the products under the typical applications they were formulated for:

- Joint compounds
- Adhesives & specialty plasters

All Knauf joint compounds, adhesives and plasters are manufactured to stringent Knauf product quality specifications.



1st Coat



Patching



Zna Coat



Bonding



Finishing Coat



Spray Application



Hand & Mechanical Tools



Skim Coating



Sandable



Wet Area



P

Roller

1.0 JOINT COMPOUNDS

Knauf manufactures and supplies an extensive range of high-quality and consistent joint compounds including bedding and base compounds, finishing compounds, cornice adhesives, all-purpose to patching and skim compounds to transform your plasterboard joints, angles and fastener heads into one seamless surface.

Knauf recommends the use of a 3 coat joint system for all plasterboard joints with high quality paper tape. Paper tape must be used in all fire rated applications, wet area applications and where drying type compounds are used for jointing.

BEDDING & BASE COMPOUNDS

Knauf's range of bedding and base compounds ensures contractors have the right compound for the right application and environmental conditions. For contractors preferring the use of mechanical tools, use longer working time BaseCote™ 90; or if there is a preference for air-drying type joint compounds then consider RediBase™. The advantage of using air-drying joint compounds, especially under hot and dry conditions is that it reduces the risk of a premature dry-out associated with plasterbased compounds.

FINISHING COMPOUNDS

Knauf's range of ready-mix finishing compounds are air-drying type compounds suitable for final coating plasterboard joints. The range is based on contractors' sanding hardness preferences ranging from moderate sanding hardness of FinalCote[®], easy sanding of LiteFinish[™], to light sanding of Total Lite[™] finishing compounds. Under mechanical sanding, it is preferable to use a higher sanding hardness finishing compound such as FinalCote[®] or LiteFinish[™].

ALL PURPOSE & PATCHING

Knauf All Purpose Premix and Total Joint Finish are suitable for use as all three coast in the Knauf 3 coat jointing system. SHEETROCK[®] Easy Sand [™] 20 is suitable for quick patch ups, maintenance jobs or small renovation work.

SUFER STRONG LIGHT WEIGHT SHEETROCK

MAIN

1.0 JOINT COMPOUND RANGE

	Bedding & Base		Finishing Compounds		
	Kuup Terr ver Man Man Man Man Man Man Man Man Man Man		Rinny Richard	KANNE TOTALAT TOTALAT	Annormal and the second
	Easy Sand™ 45	BaseCote™ 45 BaseCote™ 60 BaseCote™ 90	RediBase™ (Premix Base)	Total Lite™	Plus 3™
Ist Coat	1	1	✓ Note 3		
2nd Coat	1	<i>✓</i>	1	1	1
Finishing Coat				1	1
External Angles	<i>✓</i>	1	✓ Note 4		
Mechanical Tools	<i>✓</i>	J	√	√	1
Fire Rated – Note 1	1	J	√	√	1
Wet Area	✓ Note 2	✓ Note 2	✓ Note 2		
Curing Type	Setting / Powder	Setting / Powder	Air-Drying / Ready Mix	Air-Drying / Ready Mix	Air-Drying / Ready Mix
Working Times	ES45 = 30mins	45, 60 or 90 mins	_	_	-
Product Size	16kg bag	20kg bag 10kg available for BC45	18kg pail	21kg pail	19kg pail
Scrape back	Easy to scrape	Scrape while green	Easy to scrape	-	
Sanding				Very light sanding	Very light sanding
-	_	-		180-220 grit	180-220 grit
Compound Type	Powder	Powder	Ready Mix	Ready Mix	Ready Mix
Colour	White	Off-White	Off-White	Light Yellow	White

Note 1 – Fire Rated

Paper tape must be used in fire-rated applications.

Note 2 – Wet Area

Knauf base compounds can be used if a waterproofing membrane installed by a specialist contractor and complying with the requirements of AS/NZS 4858 Wet Area Membranes is applied over the whole face of Wet Area walls. Paper tape must be used in wet area applications.

Note 3 Paper tape must be used with air-drying type compounds when jointing. Note 4

Air Drying/Ready Mix Compounds are not recommended for embedding External Angles due to the extended drying time.

Note 5 – X Ray GIB X-Block[®] Jointing Compound is specifically designed to give lead equivalent joints on walls and ceilings when using GIB X-Block®

Plasterboard. GIB X-Block® Jointing Compound must be applied to all joints including inner layer joints of 2 or more layer systems. Paper tape must be used for jointing and at least 2 coats of GIB X-Block[®] Jointing Compound should be applied to prevent penetration of X-Rays at Joints. Joints can be finished with any of the Knauf premium finishing compounds. GIB X-Block Jointing Compound is an air-drying type compound so ensure each coat has thoroughly dried before applying the next coat.

JOINTING

SYSTEMS

Selector Chart

Finishing C	compounds	Primer	All Pu	urpose	Patching Plaster	X-Ray
knaur unter the second	FinalCote®	Tuff-Hide™ Primer-Surfacer	All Purpose Premix	Total Joint Finish	Easy Sand™ 20	GIB X-Block® Jointing Compound
						Note 5
			✓ Note 3	✓ Note 3	1	✓ Note 5
1			1	1	\checkmark	1
1	1		J	1	1	
			✓ Note 4	✓ Note 4		1
1	1	Spray / May be rolled on	1	1		1
1	1		1	1		1
Air-Drying / Ready Mix	Air-Drying / Ready Mix	Air-Drying / Ready Mix	Air-Drying / Ready Mix	Air-Drying / Ready Mix	Setting / Powder	Air-Drying / Ready Mix
_	_	_	_	_	20 mins	Air-Drying / Powder
18kg pail	4.8kg pail, 20kg pail	18.9L / 30kg pail	18kg pail	12kg pail, 4.8kg pail, 2kg pail	8.1kg bag	25kg bag
_	_	_	Easy to scrape	Easy to scrape	Easy to scrape	Easy to scrape
Light sanding	Easy sanding	Moderate	Moderate	Moderate	Moderate	
180-220 grit	180 grit	150-180 grit	150-180 grit	150-180 grit	150-180 grit	_
Ready Mix	Ready Mix	Ready Mix	Ready Mix	Ready Mix	Powder	Powder
Light Yellow	Off-White	Matt White	Off-White	Off-White	White	Brown

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1.1 BEDDING & BASE JOINT COMPOUNDSCHEMICALLY SETTING





SHEETROCK[®] Easy Sand[™] 45

SHEETROCK[®] Easy Sand[™] is a lightweight setting compound suitable for taping and second coating internal plasterboard joints, angles and spotting fastener heads.

Ideal for heavy fills, Easy Sand™ provides low shrinkage and superior bond to paper tape. It is available in 30 minute working times.

Paper tape must be used achieve high strength joint.

Advantages

- Lightweight formula approx. 20% lighter than BaseCote[™]
- Easy application light creamy gauge suitable for mechanical tool applications
- Low shrinkage
- High bond strength

Easy Sand™ Specifications		
Colour	White	
Working time	ES45 – 30 min	
Compound Type	Setting/Powder	
Packaging	16kg bag	
VOC	N/A	





BaseCote[™] is a plaster-based, settingtype compound formulated for bedding of plasterboard joints, angles and spotting fastener heads.

It is suitable for taping and second coating over SHEETROCK[®] and plasterboard surfaces and coating externals due to low shrinkage. Available in consistent 45, 60, and 90 minute working times.

Paper tape must be used to achieve high strength joint.

- Consistent working times
- Mixes easily to a smooth and creamy gauge
- Excellent consistency in working times means BaseCote[™] is suitable for mechanical applications
- Easy scrape back
- Excellent joint filling with superior adhesion, high strength and low shrinkage

BaseCote [™] Specifications			
Colour	Off-White		
Working time	Available in 45, 60 and 90 min		
Compound Type	Setting/Powder		
Packaging	20kg bag, 10kg bag (BC45)		
VOC	Less than 50g per litre		

1.1 BEDDING & BASE JOINT COMPOUNDS– AIR DRYING





RediBase [™] is a premixed, drying type base compound formulated for use in hot and dry environments. The use of drying type compounds in hot and dry conditions reduces the risk of premature dry out associated with plaster-based compounds.

Paper tape must be used in the recommended 3 coat joint system.

- Drying type compound specially formulated for use in hot and dry environments
- Premixed and ready to use
- Time saving minimal mixing and cleaning of tools
- Particularly suitable for sites with limited water access

RediBase [™] Specifications		
Colour	Off-White	
Working time	Minimum 24 hours drying time	
Compound Type	Air-Drying/Ready Mix	
Packaging	18kg re-sealable pail	
VOC	Less than 50g per litre	

1.2 FINISHING JOINT COMPOUNDS-LIGHT TO EASY SANDING





SHEETROCK[®] TOTAL LITE™

SHEETROCK[®] Total Lite finishing compound is a yellow tinted, lightweight air-drying compound specifically formulated to provide superior workability, including slick application, good open time, excellent coverage and easy sanding. It is suitable for use in conjunction with Easy Sand[™] or BaseCote[™] jointing compounds.





LiteFinish™ finishing compound is a yellow tinted, lightweight, premixed, air-drying compound formulated to deliver excellent consistency, easy application for increased productivity, low shrinkage and good hiding power.

A creamy compound that maintains its body structure, it is suitable for hand tool and mechanical application.

Advantages

- Suitable for use as a second and finishing coat
- Creamy compound with excellent body structure
- Excellent workability including better slip and pull
- Excellent coverage
- Low shrinkage
- Easy sanding
- Excellent surface for painting

Total Lite™ Specifications		
Colour	Light Yellow	
Working time	Minimum 24 hours drying time	
Compound Type	Air-Drying/Ready Mix	
Packaging	21kg re-sealable pail	
VOC	Less than 50g per litre	

- Creamy finishing compound suitable for second and finishing coats
- Easy application by hand or with mechanical tools
- Excellent hiding
- Very easy to sand by hand or with mechanical sanding tools
- Smooth finish, excellent surface for painting

LiteFinish [™] Specifications		
Colour	Light Yellow	
Working time	Minimum 24 hours drying time	
Compound Type	Air-Drying/Ready Mix	
Packaging	18kg re-sealable pail	
VOC	Less than 50g per litre	

1.2 FINISHING JOINT COMPOUNDS-EASY TO MODERATE SANDING





1.2.3 SHEETROCK[®] Plus 3™

SHEETROCK[®] Plus 3[™] is a lightweight, premixed finishing compound designed for use as the final coat over plasterboard joints.

A high performance compound that conceals and levels well over fasteners, beads, and trims with minimal shrinkage.





FinalCote[®] finishing compound is a premixed, air-drying compound developed for use as the ideal finishing coat for all plasterboard joints, angles and fastener heads. Designed to be used in conjunction with any of our base or all-purpose compounds.

Advantages

- Faster mixing time
- Better slip, excellent bond
- Less spills and waste. Better consistency minimises compound spillage and reduces risk of staining woodwork
- Low shrinkage for finer finishing

Plus 3 [™] Specifications		
Colour	White	
Working time	Minimum 24 hours drying time	
Compound Type	Air-Drying/Ready Mix	
Packaging	19kg re-sealable pail	
VOC	Less than 50g per litre	

- Semi-lightweight finishing compound
- Easy application by hand or with mechanical tools
- Very easy to sand by hand or with mechanical sanding tools
- Smooth finish, excellent surface for painting

FinalCote [®] Specifications		
Colour	Off-White	
Working time	Minimum 24 hours drying time	
Compound Type	Air-Drying/Ready Mix	
Packaging	20kg re-sealable pail	
VOC	Less than 50g per litre	

1.3 All purpose Compounds





1.3.1 All Purpose Premix

All Purpose Premix compound is an economical, air-drying, lightweight compound suitable for all three coat applications or as a finishing coat for all plasterboard joints, angles and fastener heads.

Paper tape must be used in the recommended 3 coat joint system.



1.3.2 Total Joint Finish

Knauf DIY Total Joint Finish adds the perfect finishing touch to any plastering home improvement. Whether you are repairing a ceiling, building an archway or lining an entire room with plasterboard, DIY Total Joint Finish will do just that.

Paper tape must be used when using our DIY Total Joint Finish for jointing or patching. Ensure each coat has dried before applying the next coat.

1.4 PATCHING COMPOUNDS





1.4.1 EASY SAND™ 20

SHEETROCK[®] Easy Sand[™] 20 patching/joint compounds are chemically setting type compounds suitable for plasterboard interiors that permit sameday joint finishing and, typically, next-day decoration. Easy Sand[™] 20 is suitable for all three coat applications with easy sand for fast, smooth finishing.

Advantages

- Semi-lightweight all-purpose or finishing compound
- May be used for all 3 coats or as a finishing coat
- Excellent workability, easy application by hand or with mechanical tools
- Minimal mixing and cleaning of tools
- Can be sanded by hand or with mechanical sanding tools

Excellent surface for painting

All Purpose Premix Specifications			
Colour	Off-White		
Working time	Minimum 24 hours drying time or longer in adverse climatic conditions		
Compound Type	Air-Drying/Ready Mix		
Packaging	18kg re-sealable pail		
VOC	Less than 50g per litre		

Advantages

- Lightweight all-purpose or finishing compound
- May be used for all 3 coats or as a finishing coat
- Excellent workability, easy application by hand or with mechanical tools
- Minimal mixing and cleaning of tools
- Excellent surface for painting

Total Joint Finish		
Colour	Off-White	
Working time	Minimum 24 hours drying time or longer in adverse climatic conditions	
Compound Type	Air-Drying/Ready Mix	
Packaging	12kg pail, 4.8kg pail, 2kg pail	
VOC	Less than 50g per litre	

- Quick set
- Mixes easily to a creamy gauge
- Low shrinkage
- Can be polished when near set
- Lightly sand when dry to achieve a smooth finish
- Can be coated by Knauf finishing compounds

Easy Sand™ 20 Specifications		
Colour	White	
Working time	Easy Sand™ 20 (25 min)	
Compound Type	Setting/Powder	
Packaging	8.1kg bag	
VOC	Less than 50g per litre	

1.5 PRIMERS





1.5.1 SHEETROCK[®] TUFF-HIDE™ Level 5 Primer-Surfacer

Knauf SHEETROCK[®] Tuff-Hide[™] Level 5 Primer Surfacer is a dual-purpose vinyl, acrylic latex-based coating designed especially for interior application over new plasterboard including SHEETROCK[®] and plasterboard surfaces. Prior to Tuff-Hide[™] application, the default minimum surface finish would be Level 4 as per AS/NZS 2589:2017 Gypsum linings – applications and finishing. Tuff-Hide[™] may be tinted with up to 15ml per litre of universal colorants, and is recommended for use under deep tone paint colours. Paint after overnight drying. It is strongly recommended to apply a good quality sealer followed by a minimum of two coats of quality paint in accordance with the paint manufacturer's recommendations. For normal applications, standard paints can be used over Tuff-Hide[™]. For areas requiring greater durability and toughness, waterborne enamel is recommended as the finishing coat.

Formulated primarily for plasterboard application, Tuff-Hide™ can also be applied to other surfaces such as concrete, plaster, fibre cement, dressed timber and MDF.

Advantages

- In a single spray application it provides the same results achieved using a typical two-step process of skim coating surfaces with joint compound, followed by a coat of primer to provide a high quality finish
- Ideal for critical light areas and dark toned paints
- Can be sanded for a smoother finish
- Spray application preferred, however may be roller applied for smaller jobs
- Installed cost savings versus traditional separate applications of a skim coat and prime coat

Tuff-Hide™ Level 5 Specifications		
Colour	Matt White	
Working time	Minimum 24 hours drying time	
Compound Type	Air-Drying/Ready Mix	
Packaging	18.9L/30kg re-sealable pail	
VOC	N/A	

1.6 X-RAY





1.6.1 GIB X-BLOCK[®] JOINT COMPOUND

GIB X-Block[®] Jointing Compound is specifically formulated for use with GIB X-Block[®] plasterboard to give lead equivalent joints on interior walls and ceilings.

It is a powdered air-drying compound suitable for bedding of X-Block[®] plasterboard joints, angles, spotting fastener heads and filling in gaps to provide a uniform X-ray radiation barrier. Paper tape must be used for all jointing.

- Eliminates the use of lead strips in backing joints
- Provides lead equivalent joints on internal walls and ceilings
- High strength joint with paper tape
- Compatible with Knauf finishing compounds
- Identifiable by brown colour

GIB X-Block [®] Jointing Compound Specifications		
Colour	Brown	
Working time	Minimum 24 hours drying time	
Compound Type	Air-Drying/Ready Mix	
Packaging	25kg bag	
VOC	N/A	

2.0 ADHESIVES & SPECIALTY PLASTERS

Knauf offers a range of plaster-based adhesives suitable for installing cornices, bonding plasterboard to masonry surfaces and for back-blocking ceiling and wall joints. Knauf also supplies a water-based stud adhesive for bonding plasterboard to timber and metal studs.

For specialty plasters, Knauf offers a range of enhanced formula products ideal for applications from plaster craft replications, casting of moulds for dental and ceramic products, to skim compounds designed to provide a tough smooth surface over masonry.





2.0 ADHESIVES AND SPECIALTY PLASTERS RANGE

Plaster-Based Adhesive



Cornice Adhesive 45

Cornice Adhesive 60 Cornice Adhesive 90



Back-Blocking Adhesive

lion	Suitable for	For bonding paper-faced and plaster cornices to plasterboard surfaces and reinforcing cornice joins	Applying and adhering back blocks on ceiling and wall joints
Application	Bonding	<i>✓</i>	 ✓
	Patching	\checkmark	
	Skim Coat		
	Plaster Moulds		
	Compound Type	Setting	Setting
	Working Times	45, 60 or 90 mins	120 mins
	Product Size	20kg bag 10kg available for CA45	20kg bag

Selector Chart

Plaster-Based Adhesive Acrylic Adhesive		Specialty Plasters	
<image/> <image/>	KINGU PremiumBond™ Stud Adhesive	Casting Plaster	in the second s
Bonding plasterboard sheets to masonry surfaces	Bonding plasterboard to timber and metal framing	Production of plaster craft replications. Medium hardness suitable for carving and turning	Fine specialist plaster used to produce working or slipmoulds for ceramic products and sanitary wares
1	<i>J</i>		
		V	✓
Setting	Air-Drying	Setting	Setting
65 mins	_	25 mins	20 mins
20kg bag	5.2kg/4L pail	20kg bag	20kg bag

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2.1 ADHESIVES & BONDING COMPOUNDS



Back-Blocking Adhesive is a plaster-based setting type compound specially formulated for back-blocking ceiling joints or wall joints. Back-blocking is a mandatory fixing practice described in AS/NZS 2589:2017 Gypsum linings – application and finishing. Backblocking reinforces plasterboard joints and minimises cracking and peaking resulting from building movement.



2.1.2 Cornice Adhesive 45/60/90

Advantages

Excellent wet tack

cornice joints

Cornice Adhesive is a plaster-based adhesive formulated for bonding paperfaced and plaster cornices to plasterboard surfaces and reinforcing joints in cornices. It can also be used for bonding other plaster decorative products, bonding back-blocks to plasterboard joints, laminating plasterboard sheets and caulking gaps in fire-rated wall constructions.

Mixes easily to a creamy, lump-free gauge

High adhesion and high strength

Readily accelerated for polishing of

- Long working time
- Mixes easily to a creamy, lump-free gauge
- Excellent wet tack
- Excellent adhesion and water retention
- Yellow pigmented

Back-Blocking Adhesive Specification		
Colour	Yellow	
Working time	Approx 120 min	
Compound Type	Setting	
Packaging	20kg bag	
VOC	Less than 50g per litre	

Cornice Adhesive Specification		
Colour	White	
Working time	Available in 45, 60 and 90 min working times	
Compound Type	Setting	
Packaging	20kg bag, 10kg bag (CA45)	
VOC	Less than 50g per litre	

2.1 ADHESIVES & BONDING COMPOUNDS



Masonry Adhesive is a plaster-based adhesive formulated to bond plasterboard sheets to masonry, brick or concrete walls. Masonry Adhesive has high bond strength, offers a long setting time and is suitable for bonding to difficult surfaces.



Premium Bond[™] Stud Adhesive is a water-based synthetic stud adhesive used for bonding plasterboard to timber and metal studs for wall and ceiling linings. Its buttery consistency is designed for easy no-slump application, fast grab and maximum adhesive transfer. It is suitable for a wide range of climates.

Advantages

- Mixes easily to a creamy, lump-free gauge
- High body for ease of application
- Excellent wet tack
- High strength
- Excellent adhesion to difficult substrates

- Easy to use
- Rapid tack
- Tough bond

Masonry Adhesive Specification		
Colour	Light Yellow	
Working time	65 min working time	
Compound Type	Setting	
Packaging	20kg bag	
VOC	Less than 50g per litre	

Premium Bond™ Stud Adhesive Specification		
Colour	Green	
Working time	Minimum 24 hours drying time or longer in adverse climatic conditions	
Compound Type	Air-Drying	
Packaging	5.2kg/ 4L pail, 2.6kg, 1.3kg, 600ml sausage	
VOC	Less than 50g per litre	

2.2 SPECIALTY PLASTERS



2.2.1 Casting Plaster

Casting Plaster is a general purpose plaster developed and manufactured for use in the production of plaster craft replications. Casting Plaster provides reproductions that are of medium hardness, making it suitable for carving and turning.



2.2.2 Ceraplast™

CeraplastTM is a plaster required for the casting of moulds for ceramic products and plastercraft replications.

Advantages

- Medium hardness
- General purpose plaster

- Easy to use
- Short set time

Casting Plaster Specification		
Colour	White	
Working time	20-30 min knife set time	
Compound Type	Setting	
Packaging	20kg bag	
VOC	Less than 50g per litre	

Ceraplast™ Specification		
Colour	White	
Working time	20 min	
Compound Type	Setting	
Packaging	20kg bag	
VOC	Less than 50g per litre	



3.0 JOINT SYSTEMS

Knauf strongly recommends the use of the 3 coat jointing system using paper tape to achieve the best joint strength.

Where mesh or fibreglass tape is to be used, the joints must be reinforced by back-blocking as per AS/NZS 2589:2017 Gypsum linings – applications and finishing. Paper jointing tape must be used in wet area and fire-rated applications and with air-drying type joint compounds.



3.0 JOINT SYSTEMS

3.1 Setting Compounds

Setting Compounds

Setting compounds are plaster-based products and develop strength by chemically setting. They can be applied with either hand or mechanical tools and generally provide a stronger joint than air-drying compounds.

Do

- Always use clean water, tools and containers
- Do not mix with residues of previously used compounds
- Always add powder to water, based on the mixing ratio
- Mix only enough product to meet your needs
- Mix by hand or with a power mixer (max of 400rpm) until a workable paste has been achieved
- Once setting has commenced the material cannot be remixed and must be discarded

Avoid

- Application of plaster-based setting compounds over premixed air-drying type compounds is not recommended
- On hot, windy days, where the risk of early dry-out exists, the use of air-drying taping compounds is recommended
- Under cold or wet conditions allow a longer dry time before applying the next coat

Hot & Dry Conditions – Setting Compound Dry-outs

- All setting-type compounds require water to set hard. If water is lost before the compound can set hard, then the settingtype compound will lose its strength and adhesion. To minimise setting compound dry-outs:
- Use lower setting time compounds in hotter and drier months or regions – e.g. BaseCote™ 45
- Use air-drying compounds such as RediBase™ or All Purpose Premix for taping
- For taping machines ensure a minimum of 1-2mm of setting-type compounds are embedded under the tape during application

3.2 Air-Drying Compounds

Air-Drying Compounds

Air-drying compounds are vinyl-based premixed compounds that achieve strength by drying and hardening. May require 24 hours drying time between coats depending on weather conditions.

Do

- Surfaces must be clean and free from dust
- Air-drying compounds may have a high viscosity in the pail; it may be diluted to a workable viscosity by adding water followed by mechanical mixing
- Allow previous coat to dry thoroughly before applying the next coat

Avoid

- The application of air-drying type compounds at interior temperatures less than 10°C is not recommended. Under cold or wet weather conditions, allow more than 24 hours for thorough drying
- When diluting ready-mix compounds, do not vigorously over mix as this will introduce entrapped air which can result in surface imperfections
- Do not apply air-drying compounds over joints that are not thoroughly dry. Pinholes may result
- For all Knauf finishing compounds, do not use sandpaper lower than 150 grit. Take care to avoid scratching when sanding
- The inclusion of other materials to a mix will impair the performance (e.g. reduced strength and poor adhesion) and void the product warranty

Cold & Damp Conditions – Slow drying & shrinkage

- Under cold and damp (high humidity) conditions, air-drying compounds will take longer to dry
- Air-drying compounds will continue to shrink until the compound has completely dried
- Ensure each coat of air-drying compound is dry before applying the next coat to minimise the risk of joint shrinkage
- Wet on wet application of air-drying compounds will delay the drying & shrinkage and may cause hollow joints, joint banding and tram lines along the plasterboard joints

3.3 Jointing Tapes

Jointing tapes are used to provide reinforcement to plasterboard joints and angles.

A wafer thin paper aids smooth finishing and the roughened surface produces a superior bond to jointing compounds. It is creased along the centre for application to angles.

Paper tape is recommended by Knauf for jointing of gypsum wall and ceiling linings due to its high strength and suitability for all jointing compounds and applications.

Paper jointing tape must be used in wet area and fire rated applications and with air-drying type jointing compounds.

NOTE: As the two sides of paper tape are not identical, the outside of the roll should always be applied to the wet plaster compound to ensure the best adhesion.

3.4 Jointing System

Jointing and finishing of plasterboard (SHEETROCK[®]) should be carried out according to the required level of finish (refer to Section 4.0).

If no level is specified then Level 4 is the default level of finish for domestic construction. It requires all joints and internal angles to be taped and coated and in accordance with Knauf's recommended three coat jointing system.

- Bed the paper jointing tape into an initial coat of taping, base or all-purpose compound
- Apply a second coat of base or all-purpose compound to fill and level joints
- Apply a coat of finishing or all-purpose compound

The joint compound should be finished smooth and be free of tool marks and ridges.

NOTE: application of plaster-based setting compounds over premixed air-drying type compounds is not recommended as this may affect joint performance.

Internal angles are to be completed with a two-coat application using paper tape:

- Bed paper jointing tape into an initial coat of taping, base or all-purpose compound
- Apply a coat of finishing or all-purpose compound

Extreme care must be taken in jointing and finishing where walls and ceilings are subject to critical lighting.

3.5 Coverage

Approximate coverage of Knauf joint compounds in kilograms per 100sqm of Knauf plasterboard including SHEETROCK[®].

Fixing: Stud Adhesive			
Framing span	ng span Approx. Coverage rates* Products		
450mm	4.3kg	– PremiumBond™ Stud Adhesive	
600mm	2.9kg		

Approximate: Joint Compounds Coverage				
Jointing	Approx. Coverage Rates*	Products		
Base & Bedding (1st & 2nd Coats) including angles	16kg to 22kg	Easy Sand™, BaseCote®, & RediBase™		
Finish Coat only	8kg to 10kg	Total Lite™, LiteFinish™, FinalCote®, Plus3, & All Purpose Premix		

* Based on horizontal sheeting. The coverage rates are approximate quantities and should be used as a guide only. The figures may vary significantly due to onsite application practices and environmental factors.

4.0 LEVELS OF FINISH

The term 'level of finish' applies to plasterboard linings prior to decoration. AS/NZS 2589:2017 Gypsum linings — application and finishing defines three levels of finish: 3, 4 and 5. Level 4 is the default level of finish for plasterboard linings, unless specified otherwise.

It is essential that the level of finish is determined at the design stage since each level has specific requirements for substrate tolerances and plasterboard installation, jointing and finishing. The desired level of finish may not be achieved unless all of these requirements are met through various stages of construction.

Levels of finish recommended for various lighting conditions and surface decorations are shown in Figure 1. For the full description of levels of finish refer to AS/NZS 2589:2017 Gypsum linings – applications and finishing. A summary of various levels of finish is provided below:

Level 3

This level of finish is used in areas that do not require decoration, or where finish is not important (for example, above ceiling level or inside service shafts). All joints and interior angles must have tape embedded in the joint compound and one separate coat of joint compound applied over all joints and fastener heads. Butt joints and recessed joints in walls and ceilings can be placed on framing members.

Level 4

This is the default and generally accepted level of plasterboard finish. All joints and interior angles must have tape embedded in the jointing compound and a minimum of two separate coats of joint compound applied over all joints, angles, fastener heads and accessories.

Butt joints in walls and ceilings must be between framing members and in certain cases back-blocked. Recessed joints in the ceilings must be back-blocked in any area containing three or more recessed joints.

If Level 4 surface is to be exposed to critical light, it should be covered with textured finishes such as Sheetrock[®] Tuff-Hide[™] Primer-Surfacer or wall coverings. Smooth textured finishes and flat/matt or low-sheen paints can be used when Level 4 finish is illuminated by non-critical lighting. Flat paints in this situation tend to conceal joints better. Weight, texture and sheen level of wall coverings and finishes should be carefully evaluated and joints should be adequately concealed if wall-covering material is lightweight, glossy or lightly patterned.

Notes:

- In critical lighting conditions, surface variations may still be apparent in a Level 4 surface finish
- Gloss, semi-gloss or deep tone paints are not recommended for Level 4 finish, as they accentuate surface variations

Level 5

Level 5 finish should be used where gloss or semi-gloss paints are specified or where lining surfaces will be exposed to critical lighting conditions. The Level 5 finish is characterised by a parity of surface texture and porosity. All joints and interior angles must have tape embedded in the jointing compound and a minimum of two separate coats of jointing compound applied over all joints, angles, fastener heads and accessories.

Butt joints in walls and ceilings must be located between framing members and back-blocked. Recessed joints in the ceilings must also be back-blocked. The work is finished with proprietary surface preparations or skim coating to remove differential surface textures and porosity.

A suitable paint or plaster material (e.g. Knauf SHEETROCK[®] Tuff-Hide[™] primer surfacer) is sprayed, rolled or trowelled over the defined area. The surface texture must be random and monolithic, concealing joints and fixing points.

Notes:

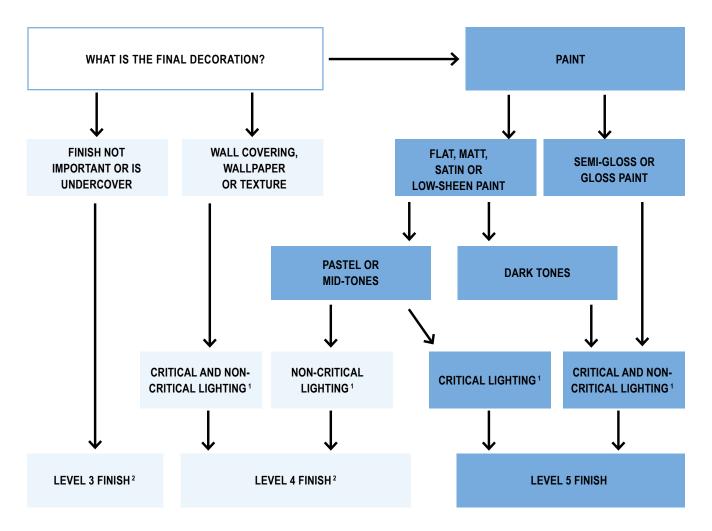
- If Level 5 finish is desired for a decorated plasterboard surface, this must be specified at the design stage
- Level 5 finish is difficult to achieve and always requires the cooperation of the framer, plasterer and painter in establishing suitable work practices that deliver the agreed painted finish for the given project
- Some minor surface variations may still be visible in Level 5 finish, however, these will be minimised
- The surface of the defined area may require sanding to be suitable for decoration

FRAMING TOLERANCES

Maximum deviations in the bearing surface of the finished framing prior to the installation of plasterboard linings are as follows:

Table 6: Framing Tolerances* (mm)				
Framing Area	Level 3	Level 4	Level 5	
90% of Area	4	4	3	
Remaining area	5	5	4	

* Deviation at any point of the bearing surface of the finished framing when measured with 1.8m straight edge (refer AS/NZS 2589:2017 Gypsum linings - applications and finishing).



Note 1:

Critical lighting: natural or artificial light projected across a surface at a low incidence angle. Non-critical lighting: when the light striking the surface is diffused or at right angles, or both Note 2:

May not be suitable for subsequent decoration to high levels of quality in the future. See Level 4 or Level 5 for upgrading requirements



KNAUF SERVICES



TECHNICAL ASSISTANCE

TecASSIST™ - 1800 811 222

Our National TecASSISTTM helpline is available to answer technical questions and provide free advice to builders, contractors, architects, engineers and home owners throughout Australia.

There are many variables that can influence construction projects, which affect whether a particular construction technique is appropriate. Before proceeding with any project, we recommend you obtain professional advice to ascertain the appropriate construction techniques to suit the particular circumstances of your project. We recommend you use qualified tradespersons to install this system.

The technical information contained in this manual was correct at the time of printing. Building systems, details and product availability are, however, subject to change. To ensure the information you are using is current, Knauf recommends you review the latest building information available on the Knauf website.

For further information, contact TecASSIST $\ensuremath{\mathsf{N}}$ or your nearest Knauf sales office.



WHERE TO BUY

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If you are wondering where to buy plasterboard and other building materials such as cornice, compounds, ceilings and plastering tools, you can be confident that wherever you are located in Australia, you will be able to find a convenient Knauf store or stockist near you using our store finder.



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