



# COMPOUNDS

PRODUCTS AND APPLICATIONS

## INTRODUCTION

Boral Gypsum and USG Corporation have joined forces to become market leaders across Asia, Australasia and the Middle East, transforming the two companies into a world-leading building products business, USG Boral Building Products (USG Boral).

At USG Boral, 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.

#### **COMPOUNDS**

USG Boral 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 USG Boral joint compounds, adhesives and plasters are manufactured to stringent USG Boral product quality specifications and have a shelf life of up to 12 months.







2ND COAT



FINISHING COAT



HAND & **MECHANICAL** TOOLS



SANDABLE



RESISTANT



PATCHING





APPLICATION



SKIM COATING





ROLLER

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## 1.0 JOINT COMPOUNDS

USG Boral 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.

USG Boral recommends the use of a 3 coat joint system for all plasterboard joints with high quality paper tape such as SHEETROCK® Paper Joint 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**

USG Boral'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 and Easy Sand<sup>™</sup> 90; or if there is a preference for air-drying type joint compounds then consider our SHEETROCK® Taping Joint Compound or 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 plaster-based compounds.

#### FINISHING COMPOUNDS

USG Boral's range of ready-mix finishing compounds are air-drying type compounds suitable for final coating plasterboard and FIBEROCK® 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 UltraLightweight and 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**

USG Boral All Purpose Premix and SHEETROCK® Easy Sand™ 5 & 20 setting type patching compounds are suitable for use as all three coats in the USG Boral 3 coat jointing system. SHEETROCK® Easy Sand™ 5 or 20 is suitable for quick patch ups, maintenance jobs or small renovation work.



		Bedding & Base			Finishing Compounds		
		Easy Sand* 45	BaseCote™ 45	TAPING Taping Joint	RediBase*	Ultra	Total Lite"
		Easy Sand <sup>™</sup> 90	BaseCote <sup>™</sup> 60 BaseCote <sup>™</sup> 90	Compound	(Premix Base)	Lightweight	
	IST COAT	1	1	✓ Note 3	✓ Note 3		
9	2ND COAT	1	1		1	✓	1
JOINTING	FINISHING COAT					✓	1
,	PRIMER COAT						
	MECHANICAL TOOLS	1	1	1	1	✓	✓
SYSTEMS	FIRE RATED - Note 1	1	1	1	1	✓	✓
SYS	WET AREA	✓ Note 2	✓ Note 2	✓ Note 2	✓ Note 2		
	CURING TYPE	Setting/Powder	Setting/Powder	Air-Drying/ Ready Mix	Air-Drying/ Ready Mix	Air-Drying/ Ready Mix	Air-Drying/ Ready Mix
	WORKING TIMES	ES45 = 30mins ES90 = 60mins	45, 60 or 90 mins	-	-	-	-
	PRODUCT SIZE	16kg bag	20kg bag 10kg available for BC45	22kg carton	18kg pail	17kg pail	21kg 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	Ready Mix
	COLOUR	White	Off-White	White	Off-White	Pale Yellow	Light Yellow

This technical information is intended to provide general information on plasterboard products and should not be used as a substitute for professional building advice. We recommend you use a qualified person to install USG Boral plasterboard. To ensure the information you are using is current, USG Boral recommends you review the latest building information available on the USG Boral website <b>USGBoral.com</b>

Finishing Compounds		Primer	All Purpose	Patching	X-RAY	
LiteFinish*	FinalCote <sup>*</sup>	TopCote 550	Tuff-Hide® Primer- Surfacer	All Purpose Premix	Easy Sand" 5 Easy Sand" 20	GIB X-Block Jointing Compound Note 4
				✓ Note 3	<b>✓</b>	✓ Note 3
1				1	1	<b>✓</b>
✓	✓	✓		1	✓	
			1 COAT = Skim + Primer			
1	1	1	Spray/May be rolled on	✓		<b>✓</b>
✓	1	1		✓		<b>✓</b>
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
-	-	-	-	-	5 or 20 mins	Air-Drying / Powder
18kg pail	20kg pail	20kg pail	18.9L / 30kg pail	18kg pail	8.1kg bag	25kg bag
-	-	-	-	Easy to scrape	Easy to scrape	Easy to scrape
Light sanding	Easy sanding	Easy to 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

#### Note 1 - Fire Rated

Off-White

Paper tape must be used in fire-rated applications. (e.g SHEETROCK® Brand Paper

Light Yellow

Note 2 - Wet Area

USG Boral base compounds can be used if
a waterproofing membrane installed by a
specialist contractor and complying with the
requirements of AS4858 Wet Area Membranes
is applied over the whole face of Wet Area
walls. Paper tape must be used in wet area
applications. (e.g SHEETROCK\* Brand Paper
Joint Tape).

Off-White

Note 3
Paper tape must be used with air-drying type compounds when jointing. (e.g SHEETROCK\* Paper Joint Tape).

Matt White

Off-White

Note 4 - 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 USG Boral 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.

White

Brown

## **BEDDING & BASE JOINT COMPOUNDS** - CHEMICALLY SETTING









## 1.1.1 **SHEETROCK®** EASY SAND™ 45/90

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 and 60 minute working times.

Use SHEETROCK® Paper Joint Tape or equivalent to achieve high strength joint.



## 1.1.2 **BASECOTE™** 45/60/90

BaseCote<sup>™</sup> 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 FIBEROCK® surfaces and coating externals due to low shrinkage. Available in consistent 45, 60, and 90 minute working times.

Use SHEETROCK® Paper Joint Tape or equivalent to 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 ES90 - 60 min		
Compound Type	Setting/Powder		
Packaging	16kg bag		
VOC	N/A		

### **ADVANTAGES**

- 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	

## **BEDDING & BASE JOINT COMPOUNDS** - AIR DRYING









## 1.1.3 REDIBASE™

RediBase<sup>™</sup> 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 such as using SHEETROCK® Paper Joint Tape or equivalent.





## 1.1.4 SHEETROCK® TAPING JOINT COMPOUND

SHEETROCK® Taping Joint Compound is designed for embedding paper tapes and providing excellent paper tape adhesion. Blended to a creamy and smooth consistency, Taping Joint Compound provides excellent slip and workability making it suitable for use by hand or mechanical tools.

SHEETROCK® Taping Joint Compound is recommended for use in environments where conditions are hot and dry, water access is limited or where mechanical taping tools are used.

Paper tape must be used in the recommended 3 coat joint system such as using SHEETROCK® Paper Joint Tape or equivalent.

#### ADVANTAGES

- · 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

- · Available in a ready-mixed formulation
- · Provides excellent slip for fast application; as a result, joint finishing is fast, easy, and smooth
- · Provides excellent adhesion and superior bond for embedding paper joint tape

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	

Taping Joint Compound Specifications		
Colour	White	
Working time	Minimum 24 hours drying time	
Compound Type	Air-Drying/Ready Mix	
Packaging	22kg carton	
VOC	N/A	



## FINISHING JOINT COMPOUNDS - LIGHT TO EASY SANDING









## 1.2.1 **SHEETROCK® ULTRALIGHTWEIGHT**

SHEETROCK® UltraLightweight finishing compound is a lightweight, yellow tinted air-drying type compound specifically designed with the finishing contractor in mind. This compound allows greater control and accuracy with less fatigue at the end of the day. It is designed to be used in conjunction with Easy Sand™ or BaseCote<sup>™</sup> jointing compounds.

SHEETROCK® UltraLightweight is up to 25% lighter than TopCote 550® and is one of the easiest sanding finishing compounds in our range.

## ADVANTAGES

- Suitable for use as a second and finishing coat
- Excellent application slip and workability by hand or mechanical tools
- · Low shrinkage
- Easy to sand
- Excellent surface for painting

UltraLightweight Specifications			
Colour	Light Yellow		
Working time	Minimum 24 hours drying time		
Compound Type	Air-Drying/Ready Mix		
Packaging	17kg re-sealable pail		
VOC	Less than 50g per litre		





## 1.2.2 **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.

## **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	

**ADVANTAGES** 

- Creamy finishing compound suitable for second and finishing coats
- Easy application by hand or with mechanical tools
- · Excellent hiding

(2) (3) (P) (P)

**LITEFINISH™** 

LiteFinish™ finishing compound is a

yellow tinted, lightweight, premixed,

air-drying compound formulated to

application for increased productivity,

low shrinkage and good hiding power.

A creamy compound that maintains its

body structure, it is suitable for hand

For ease of sanding, LiteFinish™ would

tool and mechanical application.

sit in the middle of our finishing

compounds range.

deliver excellent consistency, easy

1.2.3

- · Very easy to sand by hand or with mechanical sanding tools
- · Smooth finish, excellent surface for painting

LiteFinish™ Specifications		
Colour	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	

## FINISHING JOINT COMPOUNDS - EASY TO MODERATE SANDING









## 1.2.4 **FINALCOTE®**

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, FinalCote® is an easier sanding product than our TopCote 550°.







## 1.2.5 **TOPCOTE 550®**

TopCote 550® is an economical finishing compound suitable for contractors who prefer a harder sanding finishing compound ideal for mechanical sanding. It has been developed for use as a finishing coat over plasterboard joints, angles and fastener heads and can be used in conjunction with any USG Boral base or all-purpose compounds.

TopCote 550® is the hardest sanding finishing compound in our range.

#### **ADVANTAGES**

- 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

- · Economical grade, standard weight finishing compound
- · Easy application by hand or with mechanical tools
- · Excellent for mechanical tool sanding
- · Smooth finish, excellent surface for painting

FinalCote* Specifications		
Colour	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	

TopCote 550° Specifications		
Colour	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	











## 1.3.1 **ALL PURPOSE PREMIX**

All Purpose Premix compound (formerly LiteCote™) 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 such as using SHEETROCK® Paper Joint Tape or equivalent.

#### **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





## 1.3.2 **SHEETROCK® TUFF-HIDE™ LEVEL 5** PRIMER-SURFACER

USG Boral 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 FIBEROCK® surfaces. Prior to Tuff-Hide™ application, the default minimum surface finish would be Level 4 as per AS/NZS 2589:2007 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

All Purpose Premix Specifications		
Colour 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	

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	

## PATCHING **COMPOUNDS**









## 1.5.1 **EASY SAND™** 5/20

SHEETROCK® Easy Sand™ 5 and 20 patching/joint compounds are chemically setting type compounds suitable for plasterboard interiors that permit same-day joint finishing and, typically, next-day decoration. Easy Sand™ 5 and 20 are both suitable for all three coat applications with easy sand for fast, smooth finishing.

SHEETROCK® Easy Sand™ 5 has a working time of approximately 8-12 minutes for patching applications requiring faster setting. Choose Easy Sand™ 20 for a longer working time of approximately 25 minutes.

#### **ADVANTAGES**

- 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 USG Boral finishing compounds





## 1.6.1 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 USG Boral finishing compounds
- · Identifiable by brown colour

Easy Sand™ 5/20 Specifications		
Colour	White	
Working time	Easy Sand™ 5 (8-12 min) Easy Sand™ 20 (25 min)	
Compound Type	Setting/Powder	
Packaging	8.1kg bag	
VOC	Less than 50g per litre	

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	



		F	Plaster-Based Adhesiv	е	Acrylic Adhesive
		Cornice Adhesive 45 Cornice Adhesive 60	Back-Blocking Adhesive	Masonry Adhesive	PremiumBond™ Stud Adhesive
NO	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.	Bonding plasterboard sheets to masonry surfaces.	Bonding plasterboard to timber and metal framing
APPLICATION	BONDING	1	1	<b>✓</b>	/
	PATCHING	1			
	SKIM COAT				
	PLASTER MOULDS				
	COMPOUND TYPE	Setting	Setting	Setting	Air-Drying
	WORKING TIMES	40 or 60 mins	120 mins	65 mins	-
	PRODUCT SIZE	20kg bag 10kg available for CA45	20kg bag	20kg bag	5.2kg/4L pail

Skim Cor	npounds		Specialty	Plasters	
HARD FINISH PLASTER WA  DEPOSITE THE SERVICE OF THE	Manager All Andrews An	CASTING PLASTER	PLAST A STANDARD	PENTA PENDENTAL PROPERTY OF THE PENDENTAL PROPERTY OF THE PENDENTAL PENDENTA	POTTERY PROBESIN
HardFinish & HardFinish WA	Diamond® Veneer Finish	Casting Plaster	Ceraplast™	Dental Plaster	Pottery Plaster
Skim coat plaster designed for use with lime to achieve a hard white surface on internal walls and ceilings.	Skim coat interior wall and ceiling surfaces to achieve a white smooth or textured finish.	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.	Flashing and mounting dental models.	Fine specialist plaster used in slip moulds for ceramic pieces, plaster models and craft replicas.
<b>✓</b>	<b>✓</b>				
		1	1	✓	<b>✓</b>
Setting	Setting	Setting	Setting	Setting	Setting
35 mins or 70 mins (WA)	55 mins	25 mins	20 mins	5 mins	10 mins
20kg bag	22kg bag	20kg bag	20kg bag	20kg bag	20kg bag

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## 2.1.1 **BACK-BLOCKING ADHESIVE**

Back-Blocking Adhesive is a plasterbased setting type compound specially formulated for back-blocking ceiling joints or wall joints. Back-blocking is a mandatory fixing practice described in AS/NZS 2589:2007 Gypsum linings - application and finishing. Backblocking reinforces plasterboard joints and minimises cracking and peaking resulting from building movement.

**ADVANTAGES** 





## 2.1.2 **CORNICE ADHESIVE** 45/60

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.





## 2.1.3 **MASONRY ADHESIVE**

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.



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

Back-Blocking Adhesive Specification

Yellow

Setting

20kg bag

Approx 120 min

Less than 50g per litre

Yellow pigmented

Colour

Working time

Packaging

VOC

Compound Type

- Mixes easily to a creamy, lump-free gauge
- Excellent wet tack

- · High adhesion and high strength
- · Readily accelerated for polishing of cornice joints

#### **ADVANTAGES**

- Mixes easily to a creamy, lump-free
- High body for ease of application
- · High strength

- Excellent wet tack
- · Excellent adhesion to difficult substrates

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

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





## 2.1.4 PREMIUM BOND™ STUD ADHESIVE

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.





## 2.2.1 **WET AREA SEALANT**

USG Boral Wet Area Sealant is an acrylic water-resistant sealant. The sealant remains flexible and is capable of total joint movement of 10%.

#### **ADVANTAGES**

- Easy to use
- Rapid tack
- · Tough bond

- Flexible
- Water resistant
- · Easy to apply

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	
VOC	Less than 50g per litre	

Wet Area Sealant Specification		
Colour	White	
Working time	24 hours drying time or longer in adverse climatic conditions	
Compound Type	Air-Drying	
Packaging	450g cartridge	
VOC	N/A	







# 2.3.1 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.



## 2.3.2 CERAPLAST™ PLASTER

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



## 2.3.3 DENTAL PLASTER

Dental Plaster is used mainly for flashing and mounting dental models. It can be mixed with a harder dental stone to adjust setting time and increase in strength.



## 2.3.4 POTTERY PLASTER

Pottery Plaster is a fine specialist plaster designed for use in the casting of moulds for ceramic products and plaster-craft replications. It is ideal for slip casting of statuary and sanitary ware, and for manufacturing compression moulds used in slab casting of tableware.



## 2.4.1 HARDFINISH PLASTER

HardFinish Plaster is a general purpose product designed to provide a tough smooth abrasive-resistant finish over masonry, brick, concrete or rendered surfaces.

HardFinish Plaster is a setting compound designed to be mixed with lime to provide smooth and durable internal finish. It is free from inherent shrinkage and cracking and sets to a hard, white and blemish-free surface.



## 2.4.2 DIAMOND® VENEER FINISH

A veneer finish designed to give economical walls and ceilings a strong, hard surface that resists abrasion and surface cracking.

Diamond® Veneer Finish is perfect for light commercial and residential construction. Diamond® Veneer Finish dries in as little as 24 hours and finishes smoothly.

#### **ADVANTAGES**

- Medium hardness
- General purpose plaster

### **ADVANTAGES**

- Easy to use
- Short set time

#### **ADVANTAGES**

- High strength
- · Quick set time

### **ADVANTAGES**

- High strength
- · Easy to use for mould casting
- Suitable for compression moulds

### **ADVANTAGES**

- Easy to apply
- Smooth blemish-free surface
- Controlled set
- Low maintenance surface tough abrasive resistant
- Excellent surface for decorating with paint or wallpaper

- Fast-applying permits next day decorating
- Provides a smooth finish

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	

Dental Plaster Specification		
Colour	White	
Working time	5 min	
Compound Type	Setting	
Packaging	20kg bag	
VOC	Less than 50g per litre	

Pottery Plaster Specification		
Colour	White	
Working time	10 min	
Compound Type	Setting	
Packaging	20kg bag	
VOC	Less than 50g per litre	

HardFinish Specification		
Colour	White	
Working time	30 min or 70 min (WA)	
Compound Type	Setting	
Packaging	20kg bag	
VOC	Less than 50g per litre	

Diamond® Veneer Finish Specification		
Colour	White	
Working time	55 min	
Compound Type	Setting	
Packaging	22kg bag	
VOC	N/A	

# 3.0 JOINT SYSTEMS

USG Boral 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 2589:2007 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 airdrying 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 setting-type 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™, SHEETROCK® Taping Joint Compound 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.

#### DC

- 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 USG Boral 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.

USG Boral SHEETROCK® paper tape is a high strength special cross-fibre paper tape possessing exceptional wet strength and resisting stretching, wrinkling and tearing.

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 USG Boral 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. USG Boral SHEETROCK® jointing tape is available in 75m and 150m x 52mm wide rolls.

#### 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®) and gypsum panel (FIBEROCK®) 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 USG Boral'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 USG Boral joint compounds in kilograms per 100sqm of USG Boral plasterboard including SHEETROCK®.

FIXING: Stud Adhesive			
FRAMING 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™ & Taping Joint Compound	
Finish Coat only	8kg to 10kg	Ultralightweight, Total Lite™, LiteFinish™, FinalCote®, TopCote 550® & 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.



The term 'level of finish' applies to plasterboard linings prior to decoration. AS/NZS 2589:2007 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 2589:2007 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 backblocked 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. USG Boral SHEETROCK® Tuff-Hide™ primer surfacer or Diamond® Veneer Finish) 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

# 5.0 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

<sup>\*</sup> Deviation at any point of the bearing surface of the finished framing when measured with 1.8m straight edge (refer AS/NZS 2589:2007 Gypsum linings - applications and finishing).

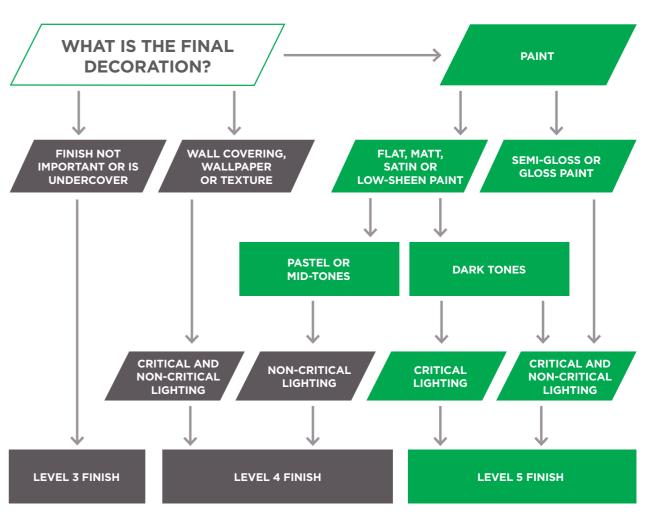


Figure 1



#### **PRODUCT INFORMATION**

See USGBoral.com for the most up-to-date product information.

#### **SALES ENQUIRIES**

1800 003 377

#### **TECHNICAL ASSISTANCE**

TecASSIST™ 1800 811 222

#### NOTE

Products described here may not be available in all geographic markets. Consult your USG Boral sales office or representative for information.

This Technical Information Guide is intended to provide general information and should not be used as a substitute for professional advice. 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 having regard to the contents of this catalogue. We recommend you use qualified tradespersons to install this system. The technical information contained in this catalogue 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, USG Boral recommends you review the latest building information available on the USG Boral website. For further information contact TecASSIST™ or your nearest USG Boral Sales Office.

