

**Dulux®**

**AcraTex®**

# Lightweight Substrates Guide







**Worth doing, worth Dulux®.**



# Lightweight Substrates Guide

This guide presents an overview of key substrates typically experienced providing a base level understanding of: Physical & Technical Properties, Key Coating System Demands, Critical Specification Requirements and GOOD-BETTER-BEST System Options. It’s not intended to cover all substrates, nor detailed aspects of coating specifications, but to give you an overview of the key considerations in providing advice on coating options. An appropriate Project Coating Specification needs to consider and satisfy: functional substrate requirements, to the level

expected by the client. To achieve this it’s important to understand (and educate) the client on Substrate Demands and communicate the system options available so that the client is better able to make an informed choice on a coating system to meet his/her requirements. For detailed project specification an appropriate Project Specification should include agreement of scope and client performance expectations.

RANGE	SUBSTRATE			CRITICAL SPECIFICATION REQUIREMENTS					DULUX RECOMMENDATION			SUBSTRATE	RANGE	
	DESCRIPTION			Cracks	Efflorescence	Adhesion	Carbonation	Hiding	GOOD	BETTER	BEST			
AERATED AUTOCLAVED CONCRETE	Panel (e.g. Hebel Power Panel)	Aerated concrete panel (600 wide), screw fixed to horizontal battens (top hats), glued together with thin bed cementitious adhesive	Panel alignment: critical for coating system efficiency & finished wall cost Standard cement renders NOT suitable: (too strong) and may damage AAC Panel adhesive is NOT flexible: joints may crack if not fully glued & CJs installed at all critical openings with top hats NOT bridging CJs	...	AAC render properly formulated	..		Levelling	RenderWall® FR Acratex Acrylic Texture AcraShield® or AcraSkin® RenderWall AcraBuild® Plus + AcraPrime® WB 2 x AcraShield			Panel (e.g. Hebel Power Panel)	AERATED AUTOCLAVED CONCRETE	
	Block (e.g. Hebel Block)	Aerated concrete blocks, laid in typical brick stretcher bond pattern, glued together with thin bed cementitious adhesive (NO mortar joints)	Requires levelling base render Standard cement renders NOT suitable (too strong) and may damage AAC panel	...	AAC render properly formulated	..		...	RenderWall AcraBuild Plus + AcraPrime WB 2 x AcraShield	RenderWall FR + Acratex Acrylic Texture AcraShield or AcraSkin	Block (e.g. Hebel Block)			
FIBRE CEMENT	Recessed Edge	“Blue Board” 7.5mm fibre cement with recessed edges to allow for flush jointing system. Categorised as “Light Weight Construction”	Very dynamic: both frame & sheet will expand & contract Frame & sheet alignment: plus texture system, critical to avoid side light joint mapping	...		.		...	AcraPatch Coarse (joints) Fastcoat or Sponge Fine Acrylic Texture + AcraShield			Recessed Edge	FIBRE CEMENT	
	Express Joint (e.g. JH ExoTec, Scyon)	9mm (+) square edge fibre cement with 10mm (+) feature joint lattice. Some panel types feature a light textured surface profile	Fixing system and flushing: relative to supplier recommendations. Typically through fixings are epoxy filler flushed and sanded intended for paint type finishing			.			2 coats AcraGuard	AcraPrime SB 2 x AcraShield	Express Joint (e.g. JH ExoTec, Scyon)			
EXPANDED POLYSTYRENE (EPS)		A fully integrated lightweight thermal cladding solution. • Installation through Exsulite® installers • Full system warranty	Compliance Requirements • Full Exsulite system componentry • Exsulite cavity drainage design • Exsulite registered installers BCA Compliant  Bushfire Rated 	...	++ Impact resistance	...	To EPS	.. Levelling	Exsulite Matrix + Full Mesh Exsulite Matrix Levelling Layer Exsulite Acrylic Texture + 2 x Membrane 				EXPANDED POLYSTYRENE (EPS)	
	Raw panel	Expanded Polystyrene (EPS) panel fixed to timber or metal framing requiring an impact resistant and weatherproofing system. Described as EIFS (External Insulating Finishing Systems) with varied similar system success in the US, New Zealand and Europe. Categorized as “Light Weight Construction”	Building Code of Australia (BCA) Compliance Compliance to BCA requirements requires independent certification to the relevant construction type design criteria including: • Full system component & installation detail • Flashing and internal drainage management • Coating system impact and weatherproofing • Contractors approved and monitored by the builder to be in full accordance with the deemed to satisfy BCA solution  Coating System Must incorporate a base coat system with long term adhesion to EPS foam. Must be endorsed by the substrate supplier as suitable	...	++ Impact resistance	.	...	To EPS	.. Levelling	Dulux DOES NOT endorse the use of its products over virgin EPS unless endorsed by the relevant substrate supplier as suitable to meet the requirements of their own BCA compliant building system.				Raw panel
	PreCoated Supplier Panel (e.g. Focal Point RendaPanel, MasterWall Panel or RMAX ThermaWall)	As for EPS raw panel except for: • Panels are factory supplied with a proprietary mesh reinforced finished ready for levelling and texture system • Full building system must be defined & supported by the substrate/system supplier		...	++ Impact resistance	.	..	To Base Panel	.. Levelling	RenderWall P400 + Full Mesh RenderWall P400 + Acrylic Texture 2 x AcraShield				PreCoated Supplier Panel (e.g. Focal Point RendaPanel, MasterWall Panel or RMAX ThermaWall)
	Core filled block (e.g. Formcraft or Ecoblock)	Interlocking, hollow EPS block, core filled with concrete. EPS essentially acts as “lost” formwork (meaning the “formwork” stays in place to be the coated face). Categorized as Insulating Concrete Formwork (ICF)		...	++ Impact resistance	.	...	To EPS	.. Levelling	RenderWall P400 + Full Mesh RenderWall P400 + Acrylic Texture 2 x AcraShield				Core filled block (e.g. Formcraft or Ecoblock)
PREVIOUSLY COATED	Good Condition (not powdery)	Maintenance repaint: Acrylic texture or acrylic paint. No paint failure. No powdery surface	Extended warranty options in negotiating original full Acratex specifications: • 7+7, 10+10 or lifetime proposition	Clean, sterilise & topcoat: • Mould treatment (bleach) & detergent • High pressure wash • Sterilise surface with PrepTreat after bleach & HPW • No primer required if surface is not powdery					Relative to substrate & project requirements		In all repaint systems specification including preparation & priming is relative to condition.		Good Condition (not powdery)	PREVIOUSLY COATED
	Poor Condition (defects, powdery)	Restoration repaint: System defects reported	Facade restoration: Requires technical project inspection & review. Step 1: Project detail and defect photos to Acratex State Manager and/ or Acratex Technical	Typical Restoration Steps: • Removal all loose flaky materials then identify & correct any water entry sources (e.g. design runoff, flashings, major cracking) • Patch & make good • Primer-Sealer (relevant to surface condition and patched elements) • 2 x Elastomeric Topcoats (AcraShield or AcraSkin) or as per specification of AcraSkin WP					Relative to substrate & project requirements		Enhanced film properties & higher film build Max film build & crack resist. in a 2-1 waterproof “paint type” finish		Poor Condition (defects, powdery)	

► The optimum system for coastal environment is 2 coats of AcraShield or AcraSkin.

## WHAT DO YOU NEED?

Dulux® Acratex® material recommendations are a guide to assist you in exploring the possibilities.

For a comprehensive understanding and to explore all available combinations, visit our dedicated platform, DuSpec+®.

DuSpec+ is the online technical resource for Specifiers and Trade Professionals that provides quick, easy access to up-to-date technical product information and system specifications across our market-leading brands – all in one convenient place.



### Specifications

Detailed system specifications for selecting and applying the right product.

Scan me for  
Specifications



### Datasheets

Designed to help you find precise technical details for each product.

Scan me for Datasheets



### Substrates

Find guidelines and coating recommendations for various surfaces and substrates.

Scan me for Substrates



### Substrate Preparations

Find the right methods and products for preparing different substrates before applying coatings.

Scan me for Preparations



DuSpec+ [duspecplus.com.au](https://duspecplus.com.au)

Learn more about Dulux Acratex at [acratex.com.au](https://acratex.com.au)

Customer Service **13 23 77**

Dulux Acratex is a division of DuluxGroup (Australia) Pty Ltd. ABN 67 000 049 427. Dulux, Acratex, AcraBuild, AcraPrime, AcraShield, AcraSkin, DuSpec+, Exsulite, RenderWall and Worth doing, worth Dulux are registered trade marks of DuluxGroup (Australia) Pty Ltd. CodeMark is a registered trade mark of the Commonwealth of Australia.

**Dulux®**

**Acratex®**