Bespoke CLADDING AND RENDER

RENDER SUBSTRATE COMPARISON GUIDE

Six systems, side by side.

Basroc, CSR Hebel, Sto, Unitex, NRG Greenboard and Dulux Exsulite are all fixed to timber or steel framing and rendered on site. Five are lightweight boards or panels and one, Hebel, is solid aerated concrete. They differ in core material, fire performance, wind class, bushfire rating, thermal value, weight and who stands behind the warranty. This guide summarises each manufacturer's current certificate and technical manual so a builder, estimator or certifier can see the differences on one page. Certificate currency and the exact scope for a lot are confirmed at quote stage.

	Basroc	CSR Hebel	Sto	Unitex	NRG Greenboard	Dulux Exsulite
Core	Mineral wool, mesh both faces	Steel-reinforced AAC to AS 5146	EPS (StoTherm) or 80 mm mineral wool	Factory-coated EPS	Flame-retardant EPS, Class M	Flame-retardant EPS, M grade
Sheet size	2200 x 600 mm	600 mm wide, 2400-3300 mm long	Per system	2400 x 1200 mm	2480 x 1200 mm (4960 available)	2400 x 1200 mm
Thicknesses	50 / 75 / 100 mm	75 mm (XL) and 50 mm	40-100 mm+	50 / 75 / 100 mm	40-100 mm certified	60 / 75 / 100 mm
Australian certification	CodeMark CM70139 (Bureau Veritas)	DTS via AS 5146.3; CodeMark CM40049 (XL), CM40233 (50)	Via Unitex CodeMarks; Sto-branded systems as Performance Solution	CodeMark CM70007 (non-cavity) and CM-AUS-80002 (cavity)	CodeMark CM30005 (Global-Mark)	CodeMark CM40264 cavity (CMI)
NCC classes	1-10	Houses and low-rise multi-res to 3 storeys	1 and 10 (Unitex pathway)	1 and 10	1-10, fire provisions excluded	1 and 10
Non-combustible	Yes, AS 1530.1	Yes	No (EPS)	No	No	No
Fire resistance level	Up to 90/90/90	Up to 180/180/180 (XL); 90/90/90 (50)	None	None	None	None
Bushfire	BAL-FZ	BAL-FZ (10 m setback at FZ)	BAL-29 / BAL-40 via Unitex	BAL-29 (9 mm), BAL-40 (17.5 mm)	BAL-29 at 75 mm+ with 10 mm render	BAL-29
Wind class	N1-N4	N2-N5 and C1-C3	Per system	N4 direct fix, N3 cavity	N1-N5 and C1-C4	N1-N4
Panel R-value, 75 mm	R1.85 (total wall to R5.54)	R0.6; total wall R1.63-3.15	About R2.0 (80 mm)	R1.67	R1.93	Total wall R3.8-4.3 with batts

	Basroc	CSR Hebel	Sto	Unitex	NRG Greenboard	Dulux Exsulite
Weight	About 7.6 kg/m2	About 44 kg/m2	About 10 kg/m2	About 9 kg/m2	About 1.5 kg/m2	About 1.5 kg/m2
Warranty	7 years; 10 with membrane	20 years CSR, to 3 storeys	StoWarranty 10 / 15 / 20 years	7 years product	10 years on sheets	System warranty; coating 7 / 10 / 15 years
Cutting and dust	Knife cut, silica-free panel	Hebel saw; AAC dust controls	Hot wire or saw	Diamond blade	Diamond blade or hot knife	Vacuum-extracted diamond blade
Queensland supply	By order from Victoria	Bretts and major trade centres	Crowntex Yatala; Dandenong	Bretts, Big River, Crowntex	Made at Yatala; 70+ distributors	Dulux Trade Centres
Where it wins	Boundary walls, FRL, Type A/B, silica-free	Boundary and party walls, acoustics, solid feel, cyclonic to C3	Architect-specified EIFS	BAL-40 lots, coastal cavity	Volume housing, cyclonic, local supply	Dulux-specified, coastal with AcraShield

Decision guide

- **Standard Class 1 house, non-cyclonic, no bushfire overlay:** NRG Greenboard or Dulux Exsulite. Local supply, proven coating stacks, best value.
- **BAL-40 overlay:** Unitex Uni-Base Board with the 17.5 mm render build-up and Unitex sign-off.
- **Wall inside the 900 mm boundary setback, or any wall that needs an FRL:** Basroc or CSR Hebel. Both non-combustible and fire-rated; Basroc is lighter and knife-cut, Hebel reaches 180/180/180 and doubles as the party wall.
- **Duplex, townhouse or busy-road lot, or a client sold on a solid wall:** Hebel PowerPanelXL for mass, acoustics and the 20-year CSR warranty.
- **Class 2 to 9 or Type A and B construction:** Basroc, or a masonry substrate with a non-combustible render. EPS is out of scope under NCC C2D10 and QDC MP 2.5.
- **Exposed coastal site, N4:** Unitex non-cavity, NRG, Exsulite or Basroc. The Unitex cavity system stops at N3.
- **Cyclonic region:** NRG Greenboard is the only system here with C1 to C4 fixing tables.
- **Specification naming Sto:** StoTherm or StoArmat with Sto Australia technical support and a Performance Solution where the certifier requires it.

Rules that apply to every EPS system

- Combustible core: no fire resistance level, no walls within 900 mm of a boundary or 1.8 m of another building, not for Type A or B construction.
- Topcoat colour light reflectance value (LRV) of 40 or higher is a warranty condition.
- Control joints at a maximum of 6 m in both directions on most systems, at every floor level and wherever the board meets another substrate.
- Annual low-pressure wash and inspection keeps the manufacturer warranty alive; membrane recoat at 7 to 10 years.
- Cutting cured cement-based render is a crystalline silica processing task in Queensland and needs wet suppression or extraction and a risk control plan.

Sources: Basroc Technical and Installation Manual V2 (2026) and CodeMark CM70139 Rev 3; CSR Hebel PowerPanelXL External Walls Design and Installation Guide HELIT016 (May 2024) and PowerPanel50 system sheet HELIT183; Sto Australia and Sto NZ specifications and BRANZ Appraisal 478; Unitex Non-Cavity (Aug 2024) and Cavity (Dec 2024) manuals, CodeMark CM70007 Rev 5 and CM-AUS-80002 Rev 5; NRG Specification Manual Edition 13 and CodeMark CM30005 Rev 4; Exsulite Specification and Installation Manual (Nov 2025) and CodeMark CM40264 Rev 2. This guide is a summary; the certificate and manual govern.