

DuSpec Specification Sheet: HEBEL

For CSR HEBEL PowerPanel DC Living Project QLD

DULUX RenderWall FR & Coventry Coarse and 955 AcraShield Finishing Coats



Substrate:

CSR Hebel Panel Wall Systems are non-load bearing external wall solutions for homes built using either timber or steel framing as an alternative to traditional brick veneer. The systems consist of 75mm thick, Autoclaved Aerated Concrete (AAC) steel reinforced Hebel PowerPanel™ fixed vertically to horizontal battens attached to the load-bearing frame. CSR Hebel PWS panels come in standard lengths of 2,400mm, 2,700mm and 3,000mm and widths of 300mm or 600mm.

Substrate Preparation:

Frame detail and panel fixing must comply with relevant building codes and be in strict accordance with CSR Hebel installation instructions & recommendations.

Dulux AcraTex recommends suitable expansion/contraction relief joints be installed at natural building weak points e.g. in line with openings (window / doors), horizontally between all floor levels, and at all interfaces of different building construction materials and or as defined by Engineer.

All fixings must be non-corrosive, suitable for the exposure condition and be in accordance with substrate supplier recommendations.

Face & Joint Alignment

Panel alignment is critical in all cladding systems and specific attention must be given to control of framing and/or panel alignment.

Ensure that all joints between panels are filled with adequate panel adhesive to allow striking flush of excess Hebel adhesive at panel face and 'panel-to-panel' face alignment is true and flat.

It is the responsibility of the panel installer to ensure all joints or major imperfections, misalignments are filled and sanded true & flush before applying any coatings system.

Remove all surface contaminants such as oil, grease or dirt, dust by hosing down with fresh potable water before application of the coating system.

Expansion Joints:

Expansion joints must be in accordance with CSR Hebel design guides including the incorporation of discontinuous top-hat sections across joints and at corners.

Expansion joints are recommended at (max) 3m height & 6m wide intervals and at building weak points e.g. in line with openings (window / doors), horizontally between all floor levels, and at all interfaces of different building construction materials

Refer CSR recommendations for additional consideration of specific timber-metal frame requirements, upper storey movement control and above opening (garage door-windows) panel fixing and support.

SCAFFOLDING and CONTROL JOINTS / DAY WORK JOINTS

All scaffolding to be provided by the Contractor must provide for unhindered access to the application face by 300mm to allow for application by roller. The Contractor/Builder is to ensure that during periods of inclement weather the scaffold will be covered with shade cloth or other suitable protective covering to protect freshly applied coatings.

Ensure scaffolding as installed to facilitate complete access to the application area in one continuous operation. The AcraTex Coating System is applied to the surface by airless spray or roller in a continuous non-stop/start manor so as to avoid lap joints. Therefore uninterrupted access to the application area is imperative, if not achieved banding or lap marks may be visible in the finish coating and these cannot be considered product or application defects

Day work joints and the installation of scaffolding shall be established between architect, builder and Applicator.

Installation of all control joints, will be by the Contractor and shall normally be sealed or filled after the coating system has been applied. If the joints are sealed /filled first, the coating shall not be applied over such sealed surfaces. Large areas should be masked off with false expansion joints to reduce them to manageable working areas – ideally three (3) metres high and five (5) metres long.

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The data provided within the Duspec system is correct at the time of publication, however it is the responsibility of those using this information to check that it is current prior to specifying or using any of these coating systems. This specification should be read in conjunction with the Product Datasheets specified within this document. "Dulux" "Berger" "Berger Gold Label" "Hadrian" "Walpamur" "Levene" "AcraTex" are registered trademarks of DuluxGroup Pty Ltd ABN . 67 000 049 427

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Coating System:

Levelling Process - Panel misalignment in Not greater than 4mm	Data Sheet	Base Layer	Min. Cover
BASE LEVELLING – SKIMCOAT <ul style="list-style-type: none"> DULUX AcraTex RenderWall FR L/Shade: 193-85836 <p>Mix Ratio : 20kg RenderWall FR to 4.4 – 5.0 kg Fresh potable water. Mix to a suitable consistency for Trowel application.</p> <p>Ensure that all imperfections are pre-filled, work away from the sun (In shaded areas). Temper the dry Hebel substrate with a light water spray to reduce excessive suction.</p> <p>Apply the RenderWall FR mix with Hawk & Trowel evenly over surface to a thickness of approx 2-4mm.</p> <p>During the application process - incorporate a 50 to 100mm width Reinforcing Mesh Tape over all Hebel joints. Taking care to ensure reinforcing mesh sit below the surface of the RenderWall FR. Where required apply additional coat(s) or process float the product to produce a level surface.</p> <p>DO NOT overspread the material - Technical properties will be compromised with thin build applications.</p>	AUDA1090	<p>Spread rate (mixed) 1L / sq m / mm</p> <p>1x20kg Renderwall (mixed) will cover approx. 7.5 m² at 2mm 5 m² at 4mm</p>	4 hour
Optional PRIME COAT : DULUX AcraTex – AcraPrime 501/1 L/Shade 194-20809 Apply by conventional roller evenly over the surface to aid application of texture coat by unifying substrate suction and consolidation levelling coat. (Highly Recommended during hot weather)	AUDA0441	10 sq m per litre	2 hours
TEXTURE COAT DULUX AcraTex Coventry Coarse L/Shade 194-85944 Apply with Hawk & Trowel evenly over surface to the thickness of the largest particles. Follow up with a light 'floating' process to level out the product using red plastic trowel/float.	AUDA1065	0.8 sq m2 per litre (15L covers 12 sq m max)	Protect from rain in first 16 hours
EXPANSION JOINTS It is recommended that all control joints be filled after the basecoat levelling system has been applied using a suitable (paintable) polyurethane joint sealant. Care must be taken to ensure joint remains free of Texture material during application, or joint is cleaned out prior to sealant application. Subsequently colour coating over the joint sealant can be accomplished with the specified system topcoat (*AcraShield). If the joints are sealed /filled first, the texture coating shall not be applied over such sealed joints. (masking is recommended) <i>* Cracking of topcoat material applied over joint sealants may occur due to the design movement of the joint system. Such cracking is not indicative of coating system failure. - as detailed above</i>			
FINISH SHIELD COATS : DULUX AcraTex AcraShield Matt L/Shade 194-X0100 (HiOp) Apply with a 12mm nap roller over the surface ensuring a wet edge is maintained over the application area. Apply in full accordance with Product and Application data sheets - by nap roller working well on to the substrate profile. Ensure adequate batch tint lots to achieve coverage over single elevations to ensure colour consistency. It is recommended to hold a volume of finish material for future maintenance touch-ups. Whilst one coat will provide adequate protection and resistance to the elements, Dulux recommends 2 coats applications for even coverage to minimising "cutting in" and "lap mark" effects. Where 2 coats are applied, dilute the first coat with 10% water.	AUDA1409	4 m2 per Litre	8 hours Protect from rain and frost in first 16 hours

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Important Notes:

Practical spreading rates will vary from quoted theoretical figures depending on substrate porosity, surface roughness, overspray losses, application methods and environmental conditions (e.g. wind).

All preparation and painting must conform to AS2311: The Painting of Buildings

Do not apply paint if Relative Humidity is above 85% or temperature is within 3°C of Dew Point.

Do not apply if the surface temperature is greater than 40°C or below 10°C, or likely to fall below 10°C during the application or drying period.

Dry times apply to a single coat at recommended spread rate and at 25°C and 50% Relative Humidity

Allow longer times under cool, moist, or still conditions and or when applied at high film builds.

Protect from dew, rain and frost for 48 hours when apply at the recommended spread rate.

Avoid application in hot, windy conditions or on hot surfaces cool the surface by hosing with water and paint the cool damp surface.

When using Bright Reds, Oranges, Blues and Yellows or where very light (or dark) colours are applied over highly contrasting colours an extra coat maybe required.

Dulux recommend full coating systems including a top coat. For ALL systems the Texture &/or Base Coat should be tinted in accordance with AcraTex Tint Guide to the specified membrane top coat colour (or a colour as close as possible to the specified colour as product and tint rules allow).

Application techniques should be adjusted to achieve the recommended DFT and finishing standard.

To avoid "Picture Framing" of texture topcoats "wet on wet" cutting in & coating technique is recommended or apply multiple coats thinning the first coat.

At Commencement of coating system application to the substrate it shall be deemed that the Applicator has certified that the surface which it is to be applied to is fit to receive the specified coating(s) system.

When the Applicator is preparing the site sample for approval he should advise the Project Superintendent if the substrate condition is not of sufficient standard to produce the specified finish.

Where possible avoid dark colours - these will give rise to much higher surface temperature that may cause addition thermal stress and cooling demand to the building envelope and/ or require extra engineering considerations (greater building costs).

Consult Dulux on the potential to use InfraCOOL Heat Reflective Coatings that will keep the surface cooler "like for like" colour.

Glancing light

Joints and panel deformation may be clearly evident under glancing light, casting visible shadows of the minute and uneven projections of the joints. Glancing light is light that is nearly parallel to the surface of the wall and casts visible shadows and uneven projections of the joints. Just like rendered masonry/ Jointed system any uneven projections will be highlighted and as such are outside the control / scope of this specification. Refer http://www.dulux.com.au/pdf/tech-advice/DLX_TECH_Glancing-Light.pdf

The coastal area is considered a marine environment and as such salt potentially can shorten the life of the coating systems. Care needs to be taken to wash down all areas twice. Once to remove surface contaminants, and raise salts to the surface and then secondly to remove these salts. Due to the locality, Weather conditions and lag time between applications of the coating system it may require the need to wash again, between coats.

This specification is to be read in conjunction with DULUX product data sheets

A DULUX warranty can be provided on request, when the FULL AcraTex system including a membrane topcoat/s is applied by a DULUX AcraTex trained applicator, according to specification, & at the specified spreading rates, & to the surface preparation details described in the DULUX AcraTex Specification Manual.

The dynamics of the substrate is outside the control of Dulux Australia and as such joint deformation or cracking is excluded from warranty terms. Colour change is a natural part of a coating weathering and is excluded from warranty terms

Refer warranty document for full terms and conditions.

Fungi and Algae can exist on virtually any surface (even glass) provided the right conditions for growth are met.

Visible growth on painted surfaces is typically caused by contaminants present together with the presence of high enough levels of moisture to support growth.

Agents in paints become ineffective where they cannot "touch" the growth source (eg where growth emanates from deposits on the film). Additionally the active agents are "consumed" in the process such that protection is time limited where conditions support ongoing growth performance is greatly improved with the inclusion of a membrane Top coat like AcraShield, Elastomeric 201 or AcraSkin.

Refer: <http://www.dulux.com.au/specifier/our-brands/dulux-acratex/more-than-just-render>

The exterior texture coatings should be cleaned on a regular basis. This will help maintain your overall aesthetic appearance and preserve your AcraTex Texture coating system. Cleaning once every year will remove light soil as well as grime and airborne pollutants refer Dulux AcraTex Care & Maintenance Guide <http://www.dulux.com.au/specifier/our-brands/dulux-acratex/acratex-care-and-maintenance>

When using this specification, the Applicator shall maintain records in accordance with AS 3894 Parts 10, 11 and 12 and others as required by the Project Manager. These records shall be made available for inspection at any time by the Project Manager or authorised representative and submitted to the Principal Contractor upon completion of work.

SURFACTANT LEACHING FROM EXTERIOR WATER-BASED COATINGS

Occasionally amber, clear or white spots/streaks are seen on a newly painted surface within the first few weeks after application. They usually appear after light rain or overnight dew and generally located in sheltered areas or areas with limited sun exposure. Under normal conditions surfactant contained in the tinted paint colour is slowly leached to the surface and washed away by rain leaving no trace and is a normal part of drying of any exterior water-based paint. Under certain atmospheric conditions and these surfactants leach or migrate to the paint surface, is concentrated forms and leaves clear or white deposits upon drying. These conditions include cool or humid weather or painting cold substrate and in most cases these marks on the wall surfaces are more noticeable on dark colours, such as browns or dark greens, etc..

The clear/white surfactants that have migrated to the wall surface areas will cause no down grading nor performance changes or long term durability concerns of the paint films integrity and unfortunately have become an appearance issue instead.

Under severe conditions they may reappear once or twice until all the surfactant has been removed. It will be less noticeable each time, and can be removed in the same manner as before. Refer http://www.dulux.com.au/pdf/tech-advice/DLX_TECH_Leaching.pdf

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