

FIXING EXOTECTM TOP HATS TO RESIDENTIAL TIMBER AND LIGHT-WEIGHT STEEL FRAMING



The information in this supplement and James Hardie's technical literature is only intended for use in relation to the relevant James Hardie products.



SCOPE OF SUPPLEMENT

This supplement has been designed to aid in the fixing of James Hardie® Exotec top hats to residential style framing in a domestic or residential house. This supplement must be read in conjunction with the current Exotec facade panel and fixing system Technical Specification and Installation manual at www.jameshardie.com.au or www.accel.com.au.

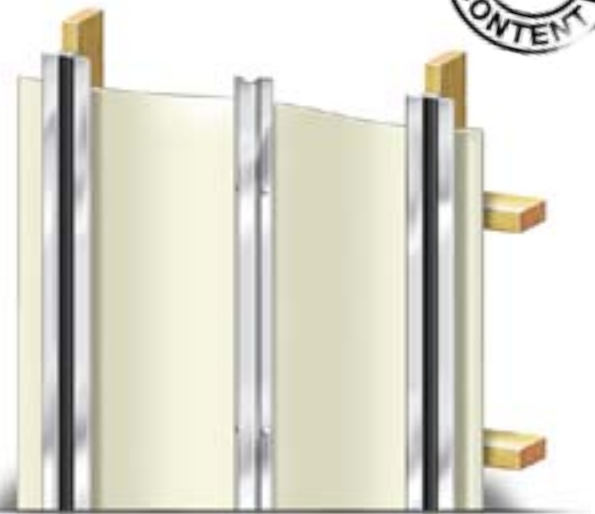
This supplement is applicable for domestic buildings that comply with AS 4055. Refer to your site engineer for verification.

OVERVIEW

The James Hardie ExoTec® facade panel and fixing system provides a durable, expressed joint panel appearance for building facades, fascias and soffits in both commercial and residential applications.



EXOTEC FACADE PANEL & FIXING SYSTEM INSTALLED TO A RESIDENTIAL DWELLING



EXOTEC TOP HATS FIXED TO TIMBER OR STEEL RESIDENTIAL FRAME

The following supplement is designed to aid in fixing the vertical ExoTec top hats to a timber or steel residential style frame. For additional installation instructions, refer to the Exotec facade panel and fixing system installation manual.

The designer is responsible to ensure that the appropriate design is undertaken for work outside the scope of this technical supplement.

The following tables in this supplement, outline the requirements for fixing top hats to timber and light gauge steel frames in a residential building.

The distance a top hat will span depends on the number of supports in a continuous length.

Single Span Top-Hats: Where a top hat is only supported at either end.

Two Span Continuous Top-Hats: Where a top hat has supports either end and in the middle.

Visit www.accel.com.au for more information



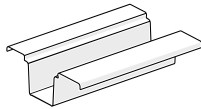
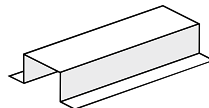
Call 13 1103

www.accel.com.au
www.jameshardie.com.au

THIS TECHNICAL SUPPLEMENT MUST BE READ IN CONJUNCTION WITH THE CURRENT TECHNICAL PRODUCT LITERATURE. JAMES HARDIE BUILDING PRODUCTS MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE TECHNICAL PRODUCT LITERATURE. ALL COMPONENTS AND ACCESSORIES MUST BE INSTALLED IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S SPECIFICATIONS. FOR THE PRODUCT WARRANTY, TERMS AND CONDITIONS REFER TO THE APPLICABLE JAMES HARDIE TECHNICAL PRODUCT LITERATURE

FIXING TOP HATS TO: TIMBER FRAMED CONSTRUCTION

FASTENERS FOR TOP HATS ONTO RESIDENTIAL TIMBER-FRAMED CONSTRUCTION WITHIN AUSTRALIA

	ExoTec Galv Top Hat: Fix to the timber frame with one M5.5 Buildex Class 3 Batten Zips® Hex Head fastener (40mm long) through the channel.
	Intermediate JH Galv Top Hat: Fix to the timber frame with two M5.5 Buildex Class 3 Batten Zips® Hex Head fasteners (40mm long), one either side of flange.

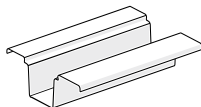
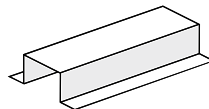
DESIGN TABLE FOR TOP HATS ONTO RESIDENTIAL TIMBER-FRAMED CONSTRUCTION WITHIN AUSTRALIA

Design Wind Classification AS 4055 Wind Classification	Top Hat Span Type				
	Single-Span Top Hats		Two-Span Continuous Top Hats		
	Maximum Top-Hat Spacing (mm)	Maximum • Length of Top-Hat • Fixing Centres of Top-Hats to timber wall (mm)	Maximum Top-Hat Spacing (mm)	Maximum Top-hat supports and fixing centres (mm)	Maximum wall height (mm)
N1	600	1330	600	1800	3600*
N3 & C1	600	1160	600	1600	3200*
C2 & N4	600	1020	450	1500	3000*

Note: *6m wall height can be achieved using three-span continuous or greater.

FIXING TOP HATS TO: LIGHT GAUGE (0.55 - 1.2 BMT) STEEL-FRAMED CONSTRUCTION

FASTENERS FOR TOP HATS ONTO RESIDENTIAL LIGHT GAUGE STEEL-FRAMED CONSTRUCTION WITHIN AUSTRALIA

	ExoTec Galv Top Hat: Fix to the light gauge steel frame with M5.5 Buildex Class 3 Batten Zips® Hex Head fastener (40mm long) through the channel in accordance with below table.
	Intermediate JH Galv Top Hat: Fix to the light gauge steel frame with M5.5 Buildex Class 3 Batten Zips® Hex Head fasteners (40mm long), one either side of flange in accordance with below table.

DESIGN TABLE FOR TOP HATS ONTO RESIDENTIAL LIGHT GAUGE STEEL-FRAMED CONSTRUCTION WITHIN AUSTRALIA

Design Wind Classification AS 4055 Wind Classification	Single-Span Top Hats		
	Maximum Top-Hat Spacing (mm)	Maximum: • Length of Top-Hat • Fixing Centres of Top-Hats to timber wall (mm)	Fixing to 0.55 - 1.2mm BMT light gauge steel framing
N1 & N2	600	1330	1 screw at top-hat end
N3 & C1	600	1160	1 screw at top-hat end

Call 13 11 03

www.accel.com.au
www.jameshardie.com.au

THIS TECHNICAL SUPPLEMENT MUST BE READ IN CONJUNCTION WITH THE CURRENT TECHNICAL PRODUCT LITERATURE. JAMES HARDIE BUILDING PRODUCTS MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE TECHNICAL PRODUCT LITERATURE. ALL COMPONENTS AND ACCESSORIES MUST BE INSTALLED IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S SPECIFICATIONS. FOR THE PRODUCT WARRANTY, TERMS AND CONDITIONS REFER TO THE APPLICABLE JAMES HARDIE TECHNICAL PRODUCT LITERATURE

CONTINUED.....

DESIGN TABLE FOR TOP HATS ONTO RESIDENTIAL LIGHT GAUGE STEEL-FRAMED CONSTRUCTION WITHIN AUSTRALIA						
Design Wind Classification AS 4055 Wind Classification	Two-Span Continuous Top Hats					
	Maximum Top-Hat Spacing (mm)	Maximum Top-Hat support and fixing centres (mm)	Maximum wall height (mm)	Fixing to 0.55 mm BMT framing	Fixing to 0.75mm BMT framing	Fixing to 1.2mm BMT framing
N1 & N2	600	1800	3600	2 screws at top-hat end & 4 at intermediate support	1 screw at top-hat end & 2 at intermediate support	1 screw at top-hat end & 1 at intermediate support
N3 & C1	600	1600	3200	2 screws at top-hat end & 4 at intermediate support	2 screws at top-hat end & 4 at intermediate support	1 screw at top-hat end & 1 at intermediate support
N4 & C2	600	1300	3000	N/A	2 screws at top-hat end & 4 at intermediate support	1 screw at top-hat end & 1 at intermediate support

Notes & Design Assumptions:

1. AS 4055: 1992 "Wind Loads for Housing" used as basis for determining design pressures and hence geometrical limits apply to the dimensions of the building.
2. Relatively flat topography (eg T1 and T2) assumed – any adverse topographical effects need to be accounted for to ensure that wind classification remains valid.
3. James Hardie literature 'ExoTec Facade Panel and Fixing System Technical Specification' used for determining the allowable top-hat spans in combination with selected top-hat spacing's.
4. Design pressure capacity based on suction within 1200mm of building edges:
N2=up to 1.25kPa,
N3=up to 2.0kPa,
C2=up to 3.0kPa

Wind Design Assumptions & Location of Building within Australia:

- N2= Wind Region A, TC2, partial shielding or TC2.5 no shielding eg located in southern states capital cities, towns and all rural areas (refer to Figure 2 in code)
- N3= Wind Region B, TC2, no shielding eg located in Brisbane, Northern NSW, Gold Coast, Sunshine Coast up to Bundaberg, Geraldton WA.
- C2= Wind Region C, TC2, no shielding, cyclonic areas eg Darwin and other settlements along Northern Territory and Queensland coastlines above Bundaberg.

Additional installation information, warranties, and warnings are available at www.accel.com.au

Call 13 11 03

www.accel.com.au
www.jameshardie.com.au

THIS TECHNICAL SUPPLEMENT MUST BE READ IN CONJUNCTION WITH THE CURRENT TECHNICAL PRODUCT LITERATURE. JAMES HARDIE BUILDING PRODUCTS MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE TECHNICAL PRODUCT LITERATURE. ALL COMPONENTS AND ACCESSORIES MUST BE INSTALLED IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S SPECIFICATIONS. FOR THE PRODUCT WARRANTY, TERMS AND CONDITIONS REFER TO THE APPLICABLE JAMES HARDIE TECHNICAL PRODUCT LITERATURE