

External wall building Solutions that can use Natural Douglas-fir* “No chemicals, Low risk ”

Cladding Type	Cavity specification	Wind Zone NZS3604:1999	Eaves specification	Code Approval
<i>Vertically fixed sheets corrugated coloursteel, zincalume &/or iron</i>	<i>Cavity not required</i>	<i>High</i>	<i>>600mm</i>	<p><i>Seek design approval under “Alternative Solution” provisions</i></p> <p><i>TA’s that support our Alternative Solutions: Nelson City Tasman Westland Selwyn Central Otago Dunedin City Clutha Queenstown Lakes Gore Invercargill</i></p>
		<i>Low</i>	<i>>450mm</i>	
<i>Monolithic Weatherboard Stucco EIFS</i>	<i>Cavity</i>	<i>High</i>	<i>>600mm</i>	
		<i>Low</i>	<i>>450mm</i>	
<i>Horizontally fixed sheets corrugated coloursteel zincalume &/or iron</i>				
<i>Brick</i>	<i>Cavity</i>	<i>High</i>	<i>>600mm</i>	<p><i>Single storey masonry vener buildings complying with B2/AS1 are an “Acceptable Solution”</i></p>
		<i>Low</i>	<i>>450mm</i>	

* Natural Douglas-fir is chemical free. Depending on building design there may be a requirement for treated timber in some building elements. In particular, we recommend a treated bottom plate when fixed on concrete foundation. The external wall timber frame solutions above are recommended with the following low-risk building design features (Refer BIA E2 2004)

- Cavity: 20mm drained and ventilated cavity complying with E2/AS1
- Number of Storeys: 1 or 2 storeys with >450mm eaves on single storey and > 600mm eave on second storey
- Roof type: Simple gable/hip roof with a pitch of 10 degrees or more, with eaves
- BIA E2 defines flat roofs, skillion roofs or complex roof shapes, internal gutters as high risk, therefore untreated Douglas-fir not recommended
- BIA E2 defines an extended or cantilevered balcony or deck above a living area as high risk, therefore untreated Douglas-fir not recommended
- *Bottom Plates: Bottom plates fixed on concrete foundation should be treated to H1.2 or better