MASA — Bottom Plate Anchor

Material: Carbon Steel 1.6mm thick

Finish: ZMAX® Galvanised

Corrosion Resistance Level
MEDIUM

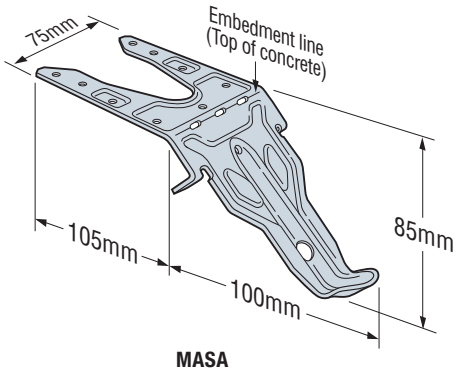
Size: 205mm x 75mm x 85mm

Features & Benefits

- Attaches easily to the concrete formwork
- Stays out of the way until needed, making slab finishing easier
- Eliminates the need to pre-drill bottom plates for anchor bolts
- Adapts to timber stud placement with two installation scenarios

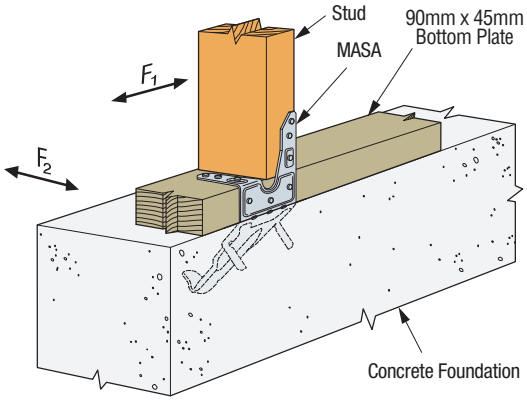
Installation

- Use all specified fasteners
- Concrete shall have a minimum f'_c = 17MPa
- Spalling—Full loads apply for spalls up to a maximum height of 32mm and a maximum depth of 22mm. Any exposed portion of the mudsill anchor must be protected against possible corrosion.
- For prescriptive anchor spacing refer to table
- Minimum MASA end distance is 100mm and minimum centre-to-centre spacing is 200mm for full load
- For continuous load path, MASA should be installed on the same side of wall as uplift connectors

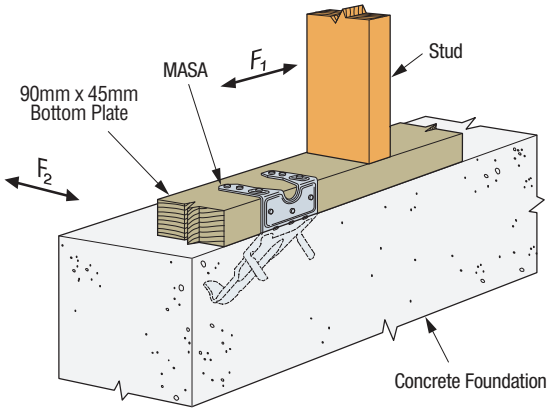


MASA
U.S. Patent D656,391S

Construction Details



Typical MASA Installation Bottom Plate Anchor - One Leg Up



Typical MASA Installation Bottom Plate Anchor

MASA Technical Data

Model No.	Sill Size (mm)	Fasteners (No. – Length x Dia., mm)		Design Capacity (kN)		
		Sides	Top	Uplift k_1 = 1.0	F1 k_1 = 1.0	F2 k_1 = 1.0
STANDARD INSTALLATION						
MASA	90 x 45, 140 x 45	3 – 38 x 3.75	6 – 38 x 3.75	5.34	6.01	2.26
ONE LEG UP INSTALLATION						
MASA	90 x 45, 140 x 45	3 – 38 x 3.75	6 – 38 x 3.75	—	4.35	—

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the NZ Strength Reduction Factor (ϕ), and applicable the k modification factors following NZS 3603 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip, which includes fastener slip and mudsill anchor deformation. Design Capacity is the minimum of test data and structural joint calculation.
2. The Strength Reduction Factor (ϕ) is 0.80 for nails in lateral loading.
3. Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
4. Timber species for joint design is seasoned Radiata Pine, which is New Zealand Joint Group J5 per NZS 3603 Table 4.1.
5. Minimum normal class concrete strength grade shall be 17 MPa.
6. Design Capacity based on a minimum concrete wall width of 150mm.
7. For simultaneous loads in more than one direction, the connector must be evaluated using the Unity Equation.

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