

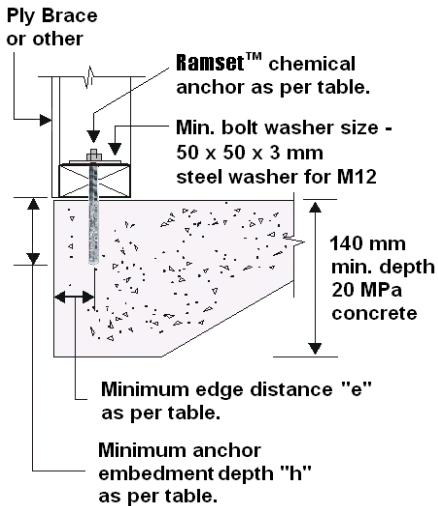
Limit State Uplift Capacity

Ramset™ Chemical Anchoring Systems

Using M12 ChemSet™ Anchor Studs

Date	03/11/11
Reference	TDS04040

Limit State Design uplift capacity of Ramset™ Chemical Anchoring - Anchor Studs used in wall frame tie-down connection (ply brace or other).



Tie Down Capacity of Bolts through Timber as per AS 1684.2-1999

Bolt Size	Uplift capacity (kN)					
	Unseasoned timber			Seasoned timber		
	J2	J3	J4	JD4	JD5	JD6
M12	27	27	26	20	16	12



Ramset™ Chemical Anchoring Systems

Anchoring Adhesive System	Part Number	Anchor Size, d _b	Installation details					Uplift Capacity (kN)
			Drilled Hole Diam. (in concrete), d _h (mm)	Fixture Hole Diam. (in timber), d _f (mm)	Min. Edge Distance, e (mm)	Min. Anchor Spacing, a (mm)	Anchor Embed. Depth, h (mm)	
ChemSet™ Reo 502™	REO502J	M12	14	15	35	75	110	25.2
ChemSet™ 801	C801J	M12	14	15	35	75	110	18
Structaset™ 401	S401J	M12	14	15	35	75	110	17.7
ChemSet™ Maxima™	CHEM12	M12	14	15	35	75	110	19.4

- Note:**
1. Uplift Capacity is based on installation into concrete with 20 MPa concrete compressive strength
 2. Uplift Capacity is based on Strength Limit State Design of the Specifiers Resource Book Edition 3 located in the Chemical Anchoring Anchor Stud Section - pages 44 to 86.
 3. Uplift Capacity is per anchor
 4. Minimum concrete substrate thickness can be b_m = 140 mm