



MiTek produces a wide range of steel straps and screws to connect wall plates to studs, such as TieDown Straps, WallStraps, StudStraps, PlateTies, and StudLoks, all of which meets the requirements of AS1684. This reference chart sets out all the design capacities for easy comparison and selection.

WALL FRAME TIE-DOWN CONNECTIONS

(For use in conjunction with AS 1684.2 & 3 Table 9.19 and AS 1684 Table 9.4)

Single 35mm or 45mm Plate

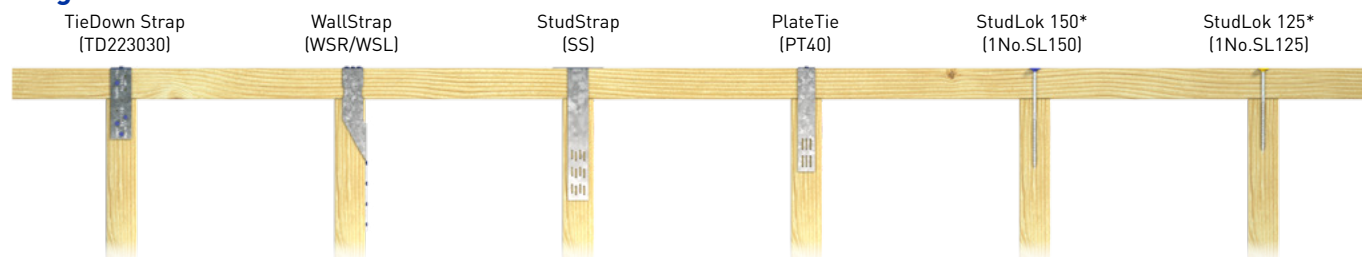


Table 1 – Single 35mm or 45mm Plate to Stud Connections

Limit State Design Wind Uplift Capacity (kN)						
Joint Group	TD223030	WSR / WSL	SS	PT40	1 No. SL150	1 No. SL125
JD4	11.2 max. (8 + 8 nails) [†]	3.8	6.1	8.3	6.3	6.3
JD5	11.2 max. (10 + 10 nails) [†]	3.2	6.1	7.0	5.0	5.0
JD6	11.2 max. (14 + 14 nails) [†]	2.4	5.8	N/A	3.7**	3.7**

Double 35mm Plate

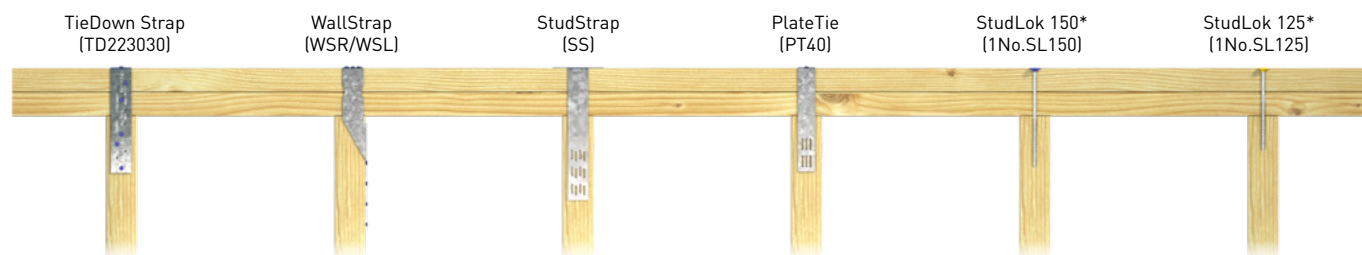


Table 2 – Double 35mm Plate to Stud Connections

Limit State Design Wind Uplift Capacity (kN)						
Joint Group	TD223030	WSR / WSL	SS	PT40	1 No. SL150	1 No. SL125
JD4	11.2 max. (8 + 8 nails) [†]	3.8	6.1	8.3	6.3	4.4
JD5	11.2 max. (10 + 10 nails) [†]	3.2	6.1	7.0	5.0	3.5
JD6	11.2 max. (14 + 14 nails) [†]	2.4	5.8	N/A	3.7**	2.6**

Double 45mm Plate

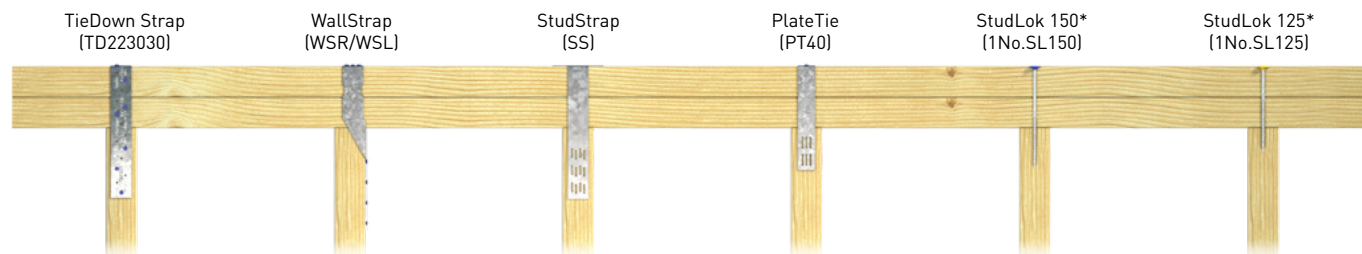


Table 3 – Double 45mm Plate to Stud Connections

Limit State Design Wind Uplift Capacity (kN)						
Joint Group	TD223030	WSR / WSL	SS	PT40	1 No. SL150	1 No. SL125
JD4	11.2 max. (8 + 8 nails) [†]	3.8	6.1	8.3	4.8	2.9
JD5	11.2 max. (10 + 10 nails) [†]	3.2	6.1	7.0	3.8	2.3
JD6	11.2 max. (14 + 14 nails) [†]	2.4	5.8	N/A	2.8**	1.7**

Notes:

- * Including 2/3.33mm dia. machine driven nails with minimum 40mm penetration into stud.
- [†] Fix this number of 30mm x 2.8mm MiTek nails to each end of TD223030 on both sides of stud.
Refer to AS 1684 Table 9.19 or MiTek product data sheet - see attached for additional capacities with fewer nails.
- ** Value is for White Baltic Pine timber.

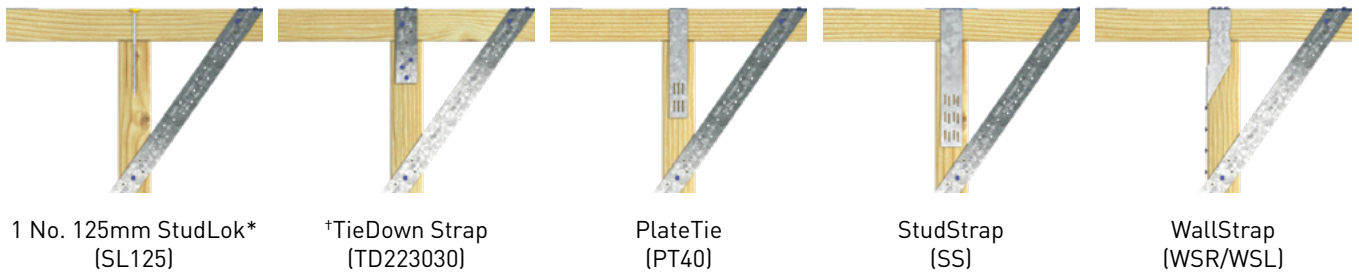


MiTek's range of wall frame tie-down connections may also be used wherever AS 1684 requires metal straps to be installed at the corners of structural wall bracing panels.

STRUCTURAL WALL BRACING PLATE-TO-STUD CONNECTIONS (For use in conjunction with AS 1684.2 & 3 Table 8.18 and AS 1684.4 Table 8.3)

Australian Standard	Reference	Bracing Type / Bracing Capacity	Australian Standard	Reference	Bracing Type / Bracing Capacity
AS 1684.4	Table 8.3(c)	<p>Fix with MiTek Connectors</p> <p>1,800mm min. to 2,700mm max. Bracing Type A (1.5kN/m)</p>	AS 1684.4	Table 8.3(c)	<p>Fix with MiTek Connectors</p> <p>1,800mm min. to 2,700mm max. Bracing Type B (3.0kN/m)</p>
AS 1684.2 AS 1684.3	Table 8.18(c)	<p>Fix with MiTek Connectors</p> <p>1,800mm min. to 2,700mm max. Bracing Type A (1.5kN/m)</p>	AS 1684.2 AS 1684.3	Table 8.18(c)	<p>Fix with MiTek Connectors</p> <p>1,800mm min. to 2,700mm max. Bracing Type B (3.0kN/m)</p>

Single 35mm or 45mm Plate



Double 35mm or 45mm Plate



Notes:

- * Including 2/3.33mm dia. machine driven nails with minimum 40mm penetration into stud.
- † Fix 3 or 4/30mm x 2.8mm dia. MiTek nails to each end of TD223030 on both sides of stud for Type A or Type B bracing respectively.

For **Product Data Sheets** or more information about MiTek's Engineered Building Products, please call your local state office or visit: mitek.com.au