

SPAX screws for CLT half-lap wall joints



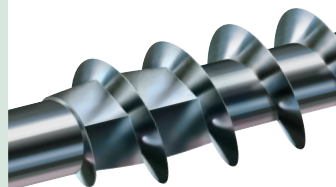
SPAX Advantages

T-STAR plus



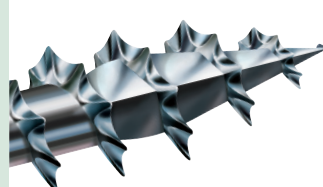
Ensures maximum torque transfer when driving screws.

4CUT



From screw lengths over 160mm. Reduces the screwing-in torque significantly.

Ground Seration / 4CUT



No pre-drilling (wood dependent), reduces splitting. Square end displaces the fibres and reduces screwing in torque.



Certified proof of origin offers a high degree of safety, quality and continuity.

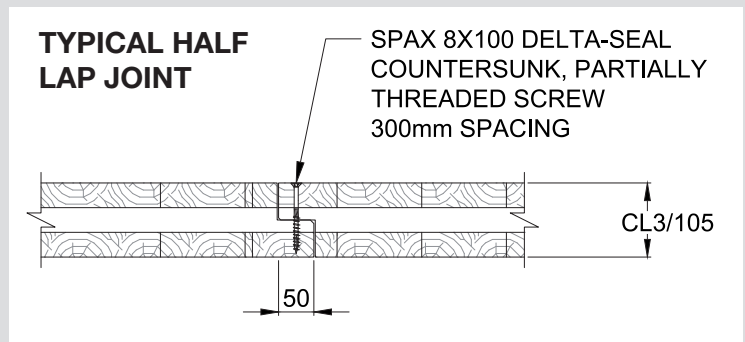
Technical data for SPAX screws in XLam CLT half-lap wall joints

To determine the shear capacity and joint strength group of XLam CLT wall panels fastened with SPAX screws, testing was conducted in accordance with AS1649 for adoption in design using AS1720-2010, NZS3603-1993 and the SPAX design guide. The recommended joint group and corresponding characteristic lateral resistance of the SPAX screws are shown in the table below. Loads are applied vertically down the wall and parallel to the joint.

What is a Lap Joint?

Lap joints are used to join CLT floor, wall and roof panels together to provide a CLT joint that limits differential movement between the panels.

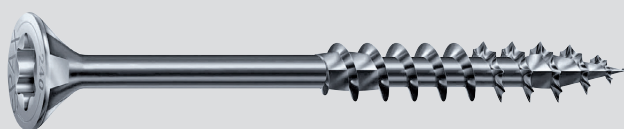
It is a straightforward joint to manufacture with one pass from the CNC machine to each edge of the panel. The joint is then screwed together on site with SPAX screws.



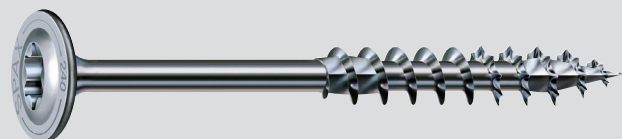
LOAD DATA

Timber/Joint Group	Characteristic Shear Capacity per Screw (kN) loaded parallel to joint			Bit Size T-Star Plus
	SPAX Screw	XLam Wall Panel		
		CL3/85	CL3/105	
AS1720 Joint Group JD4	6 x 80 WH ¹	1.28	-	T-30
	8 x 80 CS P/T ²	2.08	-	T-40
	6 x 100 WH ¹	-	1.28	T-30
	8 x 100 CS P/T ²	-	2.08	T-40
NZS3603 Timber Group J4	6 x 80 WH ¹	1.36	-	T-30
	8 x 80 CS P/T ²	2.21	-	T-40
	6 x 100 WH ¹	-	1.36	T-30
	8 x 100 CS P/T ²	-	2.21	T-40

NOTE: These values apply to XLam CLT only.



1. CS P/T—Countersunk partial thread screw



2. WH—Washer head screw