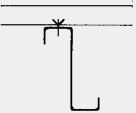
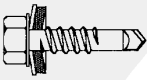
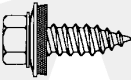
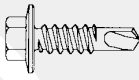
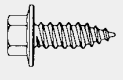
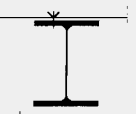
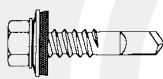

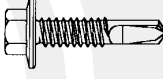
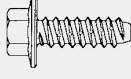

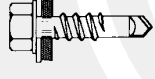

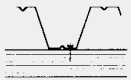
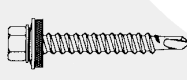

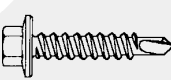



# Types of jointing in thin plate

Table 209 shows the fasteners which are usually used in joint and fastenings of thin plate constructions. For external plate in corrosive class C4, for example for uninsulated buildings, drilling or thread pressing screws are used with grommet

with vulcanised EPDM-rubber under the screw head. Screws without sealing are used to fasten the supporting plate in insulated buildings.

**Table 209 Examples of building screws for tightening into steel and wood**

Fields of application	Outdoor; stainless steel, up to corrosive class C4 according to the table on page 611.		Indoor; zincplated carbonised steel, corrosive class C1 according to the table on page 611.	
	Drilling	Tapping screws	Drilling	Tapping screws
 Plate for light beam	 $\phi$ 4,8, 5,5 and 6,3	 $\phi$ 4,8 and 6,3 C-point	 $\phi$ 4,8, 5,5 and 6,3	 $\phi$ 4,8 and 6,3 C-point
 Plate for beam	 $\phi$ 5,5	 $\phi$ 6,3 B-point	 $\phi$ 5,5 and 6,3	 $\phi$ 6,3 B-point
 Plate for plate	 $\phi$ 4,8, 5,5 and 6,3		 $\phi$ 4,8, 5,5 and 6,3	
 Plate for wood	 $\phi$ 4,8, 5,5 (Lacquered carbonised steel, stainless, aluminium, C2-C4)	 $\phi$ 4,8, 6,5 A-point	 $\phi$ 4,8, 6,5	 $\phi$ 4,8, 5,5

**Table 210 Material in fasteners with regards to corrosiveness and thin plate construction, with regards to the risk of corrosion only**

Class of corrosiveness	Material in thin plate construction	Material in fasteners					
		Aluminium	Zincplated and possibly chromate steel, film thickness $\geq 7\mu\text{m}$	Hot dip galvanised steel <sup>b</sup> , film thickness $\geq 45\mu\text{m}$	Stainless steel, case-hardened (C1) <sup>d,e</sup>	Stainless steel (A2) <sup>d</sup> (A4) <sup>d</sup>	Monel <sup>a</sup>
C1	A, B, C	X	X	X	X	X	X
	D, E, R	X	X	X	X	X	X
C2	A	X	-	X	X	X	X
	C, D, E	X	-	X	X	X	X
	R	X	-	X	X	X	X
C3	A	X	-	X	-	X	X
	C, E	X	-	X	(X) <sup>c</sup>	(X) <sup>c</sup>	-
	D	X	-	X	-	(X) <sup>c</sup>	X
	R	-	-	X	X	X	X
C4	A	X	-	(X) <sup>c</sup>	-	(X) <sup>c</sup>	-
	D	-	-	X	-	(X) <sup>c</sup>	-
	E	X	-	X	-	(X) <sup>c</sup>	-
	R	-	-	X	-	X	X
C5-I <sup>g)</sup>	A	X	-	-	-	(X) <sup>c</sup>	-
	D <sup>f</sup>	-	-	X	-	(X) <sup>c</sup>	-
	R	-	-	-	-	X	-
C5-M <sup>g)</sup>	A	X	-	-	-	(X) <sup>c</sup>	-
	D <sup>f</sup>	-	-	X	-	(X) <sup>c</sup>	-
	R	-	-	-	-	X	-

Generally, fasteners of steel without coating can be used in class of corrosiveness C1.

A = Aluminium regardless of surface finish.

B = Bare steel plate.

C = Hot dip galvanised, Z275, or aluzinc coated, AZ150, steel plate.

D = Hot dip galvanised steel plate + coating of paint or plastic.

E = Aluzinc coated, AZ185, steel plate.

R = Stainless steel.

X = Type of material recommended with regards to corrosion.

(X) = Type of material recommended with regards to corrosion on given condition.

- = Type of material is not recommended with regards to corrosion.

a = Only concerns rivet.

b = Only concern screw and nut.

c = Isolating washer of durable material between plate and fastener.

d = Stainless steel according to SS-EN 10 088.

e = Risk for tarnishing exists.

f = Plate material only after contact with the supplier.

g) = There are austenitic manganese steel which are stable in all classes of corrosiveness. In aggressive atmosphere C5-I and marine environment there should be an isolating washer between fastener and plate. Sometimes the corrosion resistance is increased further in marine environment through zincification of acidproof screws.

Source: SBI.