

# X1 EVO & X1 EVO-L



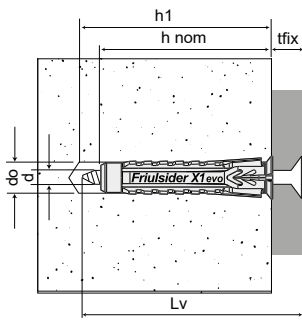
**ICCONS**  
Serious Connections

Autoclaved Aerated Concrete (AAC)

TDS | 1039.2

**FRULSIDER**  
YOUR FIXING FACTORY

**X1 EVO** **X1 EVO-L**



## Material Properties

Plug	Nylon Pa6
CSK Head / Pan Head chipboard screws	Zinc Clear, Class 5.6
Hex wood screw	Zinc Clear, Class 5.6

Installation Temp.	+5 to +40 °C
Working Temp.	+5 to +40 °C (max 80 for short period)

d	= Screw diameter
d <sub>o</sub>	= Hole diameter
h <sub>1</sub>	= Minimum hole depth
h <sub>nom</sub>	= nominal embedment depth

L	= anchor length
L <sub>v</sub>	= screw length
t <sub>fix</sub>	= fixture thickness
T <sub>inst</sub>	= torque

## Recommended <sup>(1)</sup> Loads in Autoclaved Aerated Concrete (AAC) (≥ 5.0 MPa)

Single spacing with large anchor spacing and edge distance

	h <sub>1</sub>	h <sub>nom</sub>	d <sub>o</sub>	d	Aerated Concrete		Edge Distance	Spacing				
					Min hole depth	Nominal emb. depth			Hole Dia.	Dia. of screw & Type	Tensile (kN)	Shear (kN)
					mm	mm			mm	mm	N <sub>ec</sub>	V <sub>ec</sub>
Ø 5 x 25	35	25	5	Chip. Ø 3.0	0.05	0.08	45	40				
				Chip. Ø 3.5	0.06	0.1						
				Chip. Ø 4.0	0.08	0.1						
				Wood. Ø 4.0	0.09	0.12						
Ø 6 x 30	40	30	6	Chip. Ø 4.0	0.05	0.08	55	55				
				Chip. Ø 4.5	0.06	0.1						
				Chip. Ø 5.0	0.09	0.12						
				Wood. Ø 4.0	0.08	0.1						
				Wood. Ø 5.0	0.1	0.13						
Ø 8 x 40	50	40	8	Metric. M4	0.09	0.12	70	60				
				Chip. Ø 4.5	0.11	0.13						
				Chip. Ø 5.0	0.15	0.2						
				Chip. Ø 6.0	0.19	0.22						
				Wood. Ø 5.0	0.17	0.2						
				Wood. Ø 6.0	0.19	0.23						
				Metric. M5	0.18	0.22						

	h <sub>1</sub>	h <sub>nom</sub>	d <sub>o</sub>	d	Aerated Concrete		Edge Distance	Spacing				
					Min hole depth	Nominal emb. depth			Hole Dia.	Dia. of screw & Type	Tensile (kN)	Shear (kN)
					mm	mm			mm	mm	N <sub>ec</sub>	V <sub>ec</sub>
Ø 10 x 50	60	50	10	Chip. Ø 6.0	0.25	0.3	90	75				
				Chip. Ø 8.0	0.3	0.35						
				Wood. Ø 6.0	0.25	0.3						
				Wood. Ø 7.0	0.3	0.35						
				Wood. Ø 8.0	0.3	0.35						
Ø 12 x 60	70	60	12	Metric. M6	0.28	0.32	110	90				
				Chip. Ø 8.0	0.31	0.5						
				Wood. Ø 8.0	0.35	0.5						
				Wood. Ø 10.0	0.43	0.5						
Ø 14 x 70	80	70	14	Metric. M8	0.38	0.5	130	110				
				Wood. Ø 10.0	0.32	0.5						
				Wood. Ø 12.0	0.44	0.6						
				Metric. M10	0.44	0.6						

1kN ≈ 100 kgf

<sup>(1)</sup> The recommended loads derive from the mean ultimate loads and are inclusive of the total safety factor γ=6

The use of plastic anchors is not recommended for permanent suspended loading applications above 40 °C.

NOTE: The torque has to be regulated according to the type of installation and base material. In the absence of CE markings, the recommended loads derive from tests carried out in the Friulsider laboratory in accordance with the appropriate standards. The load values are only valid if the installation has been carried out correctly. The design engineer is responsible for the designing and calculation of the fixing.

## Installation

