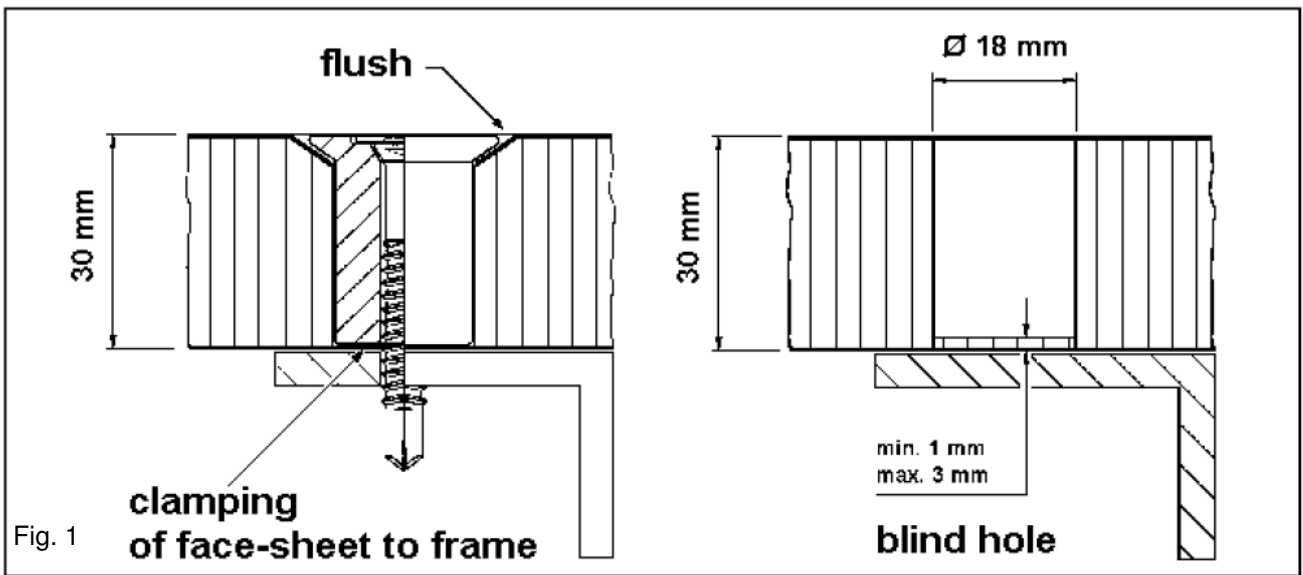


MonoLock-screw connection

The MonoLock-connection has been developed to ensure a strong and durable screw connection of the Omnia panel with load carrying members in aluminium and steel. The connection consists of a self-drilling screw in a clamp sleeve.

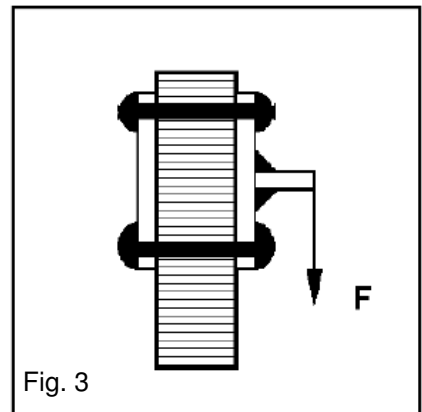
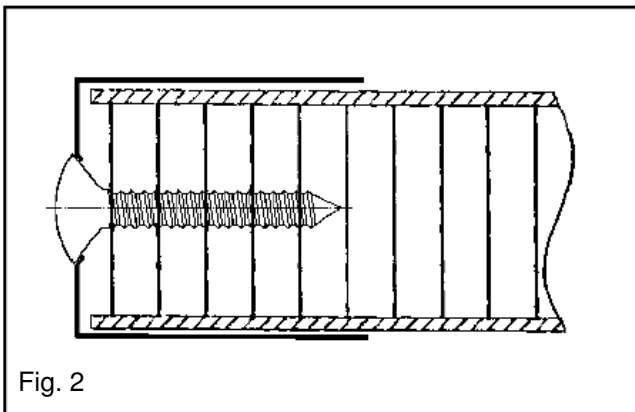
First a blind hole must be drilled into the Omnia panel. The self-drilling screw is screwed into the metal member together with the clamp. The clamping of the lower face sheet and the metal member is carrying the main load. Additionally, the flange of the sleeve clamps the upper face sheet and provides a flat surface.

- Assembly information:
- MonoLock-sleeve and drill screw: EJOT Saphir JT2-ST5-6-6.3x60
 - Forstner-drill diameter 18 mm
 - Torque: 6 - 10 Nm. Frame: Aluminium 3 - 5 mm, Steel 2 - 4 mm.



Other connections using screws or bolts

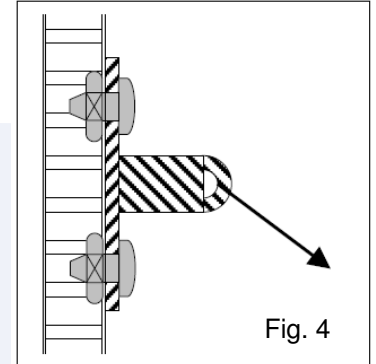
Edge closings and other non-load bearing connections can be achieved by assembling a profile to the edge with wood screws in sideward direction (see fig. 2). Bolts could possibly be used by the use of load distribution plates to enable a higher loading capacity. The core should not be crushed. (see fig. 3)



Fasteners: blind rivets

Fasteners, especially with a flange counter head, are very well suited for connections to the Omnia panel. The high elongation-to-break of PP and the high strength of the glass fibres yield a high load capacity. The process, in which the face sheets are welded to the core, means there is no chance of any delamination caused by the use of rivets.

With load distribution plates an even higher load can be introduced (see fig. 4) Rivets do not only offer high load capacity, but can also be processed easily. The table below shows various types of rivets. Use this table to choose the best rivet for your application.



Selection table - blind rivets

Manufacturer	Rivet Type	Pull-out strength	Shear strength	Remarks
Huck	Magna-Tite MTP-B8-4S	+	++	
Tucker (Emhart)	POP [®] SCD 608 BS	+	+	
	POP [®] SCD 612 BS	+	+	

For applications, treatment and storage please pay attention to the “Technical Data Sheet” of the manufacturer.

Supplier’s information

We recommend following supplier:
 Star Fasteners
 Unit3 . Gallows Industrial Estate
 Furnace Road
 Ilkeston . Derbyshire
 t: 0115 932 4939
 f: 0115 944 1278
<http://www.starfasteners.co.uk/>

contact: Dan Starbuck. --- Please refer to us! ---

The specifications in this data sheet represent the current state of our technical knowledge and its purpose is to inform about the Omnia Panel and its applications. The specifications therefore do not guarantee particular properties or suitability for a specific application. We reserve the right to make changes in accordance with technological processes and other developments. We guarantee faultless quality in accordance with our conditions of sale.