



### Fittings

Here the angle can be defined by individual parameters. If fixed values are entered, the fitting is bound to the values and can be ordered as stock articles, for example. If the values are free, the dimensions and/or angles result from the construction and the HPL stringer angle must be mancufactured individually.

🕴 HPL stringer angle						×	
Metal fitting Orillings general Orillings left	Name:			W1			
Orillings right JD-View	1 Width	40.00	mm	V.+			
	3 Thickness:	5.00	mm	A I	○ ○ ○		
	🔽 Length fixed	L: 270.0	0 mm			W3	
	4 Minimum length:	100.0	D mm	4			
	Oening angle fixed	W0: 90.00	°	W2 📗			
	Angle top left fixed	W1: 0.00	۰	+		+	
	Angle bottom left fixed	W2: 0.00	۰	- /		- 🌲	
	Angle top right fixed	W3: 0.00	۰	/	1_	NALA .	
	Angle bottom right fixed	W4: 0.00	۰			VV4	
	Colour:	_			1		
	Mirror				?		
					3	-	
	Additional parts:					+ 23	
	₿↓ Name Book	number	Price	Unit	Category		
	l						
OK Cancel							

Here, the drilling parameters are defined.

🕴 HPL stringer angle			×				
Metal fitting Drillings general B: Drillings left B: Drillings right - 30-View	1 Diameter stringer drilling:   10.00     2 Diameter front pocket:   16.00     3 Durchmesser im Beschlag:   6.60     4 Depth front pocket:   3.00						
	B↓ Name Book number	Price Unit Category					
OK Cancel							



The position of the drillings and parameters such as threads and countersink holes are defined here. A new hole is added to the top node 'Drillings left' with the right mouse button 'NEW'.



The result of the input can then be checked visually via the 3D visualisation menu. This is particularly helpful when more complex fittings are entered. If values are fixed when entering the fitting, as in the image above, they can be displayed exactly. Free values get a value in 3D that allows a realistic but not exact display.





#### **Drilling pattern**

Here, fittings can be inserted + or deleted X. The table contains basic information on the parameters of the fitting. A schematic help image is available at the bottom. Several angles can be inserted in the drilling pattern, by using suitable rules.



If a new fitting is inserted into the drilling pattern, the fitting and the position must be entered in the construction. If the length of the fitting is fixed, it is centred; if the length is free, it adheres to the distance between the stringer edge and the treads. "Continuous" works on the tread side and also on the non-tread side and has no reference to the treads. On the tread side, 'Above tread below stringer', 'Between treads' and 'Above stringer below tread' are also available. This results in a fixed reference to the tread, which allows flush connection to the stringer and the positioning of several angles.





"Rules 1" can be used to organise fittings that rise asymmetrically on one leg with the stringer or that should always get a special drilling position at the entrance or exit. Only one of the two rules can be active per fitting. The drilling pattern must contain 2 or more angles. One fitting is assigned "Omit if left side of fitting entry" and the other "Omit if left side of fitting at exit".



"Rule 2" organises drilling patterns with angles of different lengths. This ensures that always the longest angle that fits into the connection is used. Here, for example, stock articles can be organised in raster lengths.





### Predefinitions

The angle for the available corner connections can be set in the predefinition.



#### In the groundplan

The angle can be created on the corner connection via Create  $\rightarrow$  HPL-stringer angle. The menu is only available for the 4 "Simple" connections. The other connections are not supported.





The drilling patterns can be changed in the properties of the corner connection on the drilling pattern tab.



In addition to the tread side and non-tread side, the angle can also be located in the stringer extension if there is a distance to the wall or in the wall tie.



HPL stringer angle



### In the height construction

The angles can be selected in the height construction and in 3D Plus by using the right mouse button. Here the "Delete" and "Properties" functions are available. This makes it possible to check the height of the position. It also allows the user to edit individual angles that are congruent in the groundplan and therefore cannot be selected individually in the groundplan.





### Templates



### Production

The angles are put out as a DXF file via "Export  $\rightarrow$  DXF  $\rightarrow$  Steel details". Here the top views and the side view of the legs are put out and labelled with the name of the two stringers that are to be connected to the angle.





In the post-processor, the working operations required for processing in the stringers were implemented under "Drillings→Railing part - Railing part".

