

MOUNTING INSTRUCTIONS

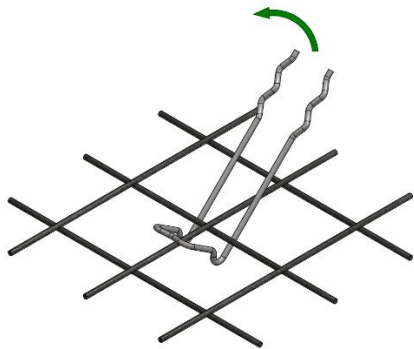
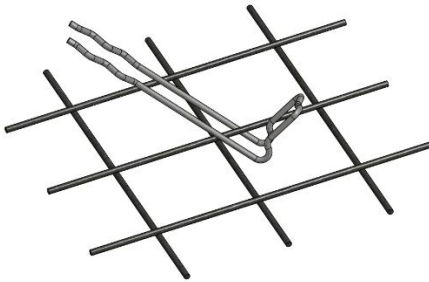
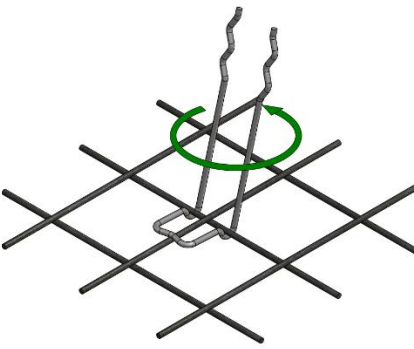
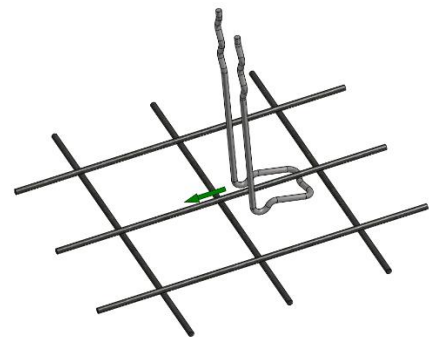
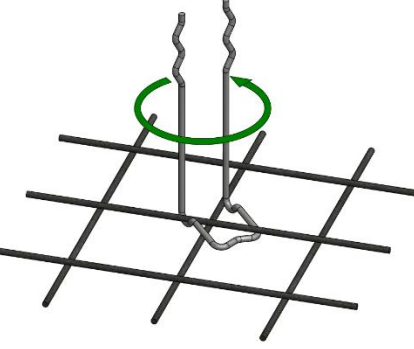
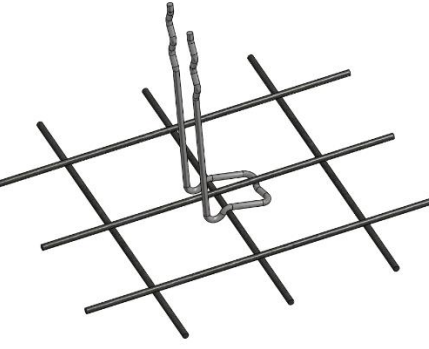
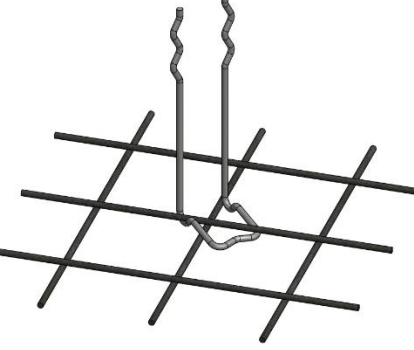
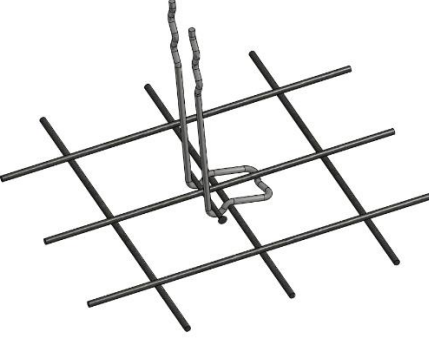


SANDWICH PANEL ANCHOR SYSTEM | TVA PANEL TIE - CLIP ON HAIRPIN



PLACING THE CLIP-ON HAIRPIN "TVA"

Table 43

Hairpin TVA with wire diameters of 3.0 and 4.0 mm		Hairpin TVA with wire diameter of 5.0 mm	
<p>1. The TVA hairpin is pushed under the upper reinforcement bar and then is lifted upright.</p>		<p>1. One arm of the TVA anchor is pushed under the upper reinforcement bar and is lifted upright.</p>	
<p>2. The anchor is rotated anti-clockwise.</p>		<p>2. The anchor set upright is pushed onto the lower reinforcement bar.</p>	
<p>3. The rotated anchor is stopped in this position.</p>		<p>3. The hairpin is sprung with a light pressure.</p>	
<p>4. The anchor is attached in this position at the reinforcement crossing.</p>		<p>4. A nail is inserted in this position over the notches of the hairpin and under the upper reinforcement bar.</p>	

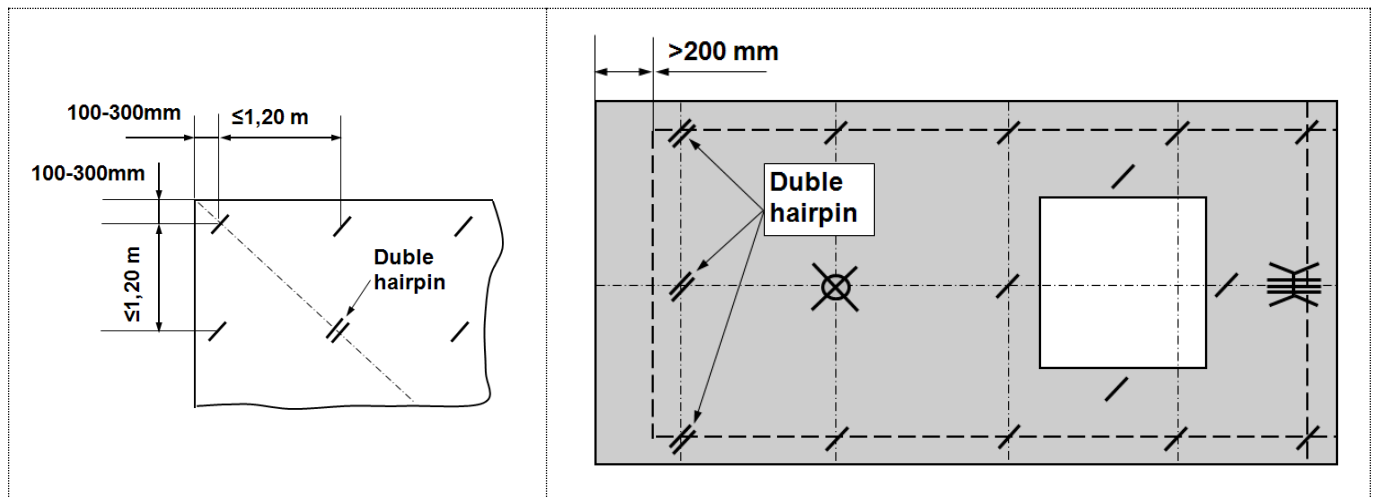
The supporting anchors TVA and TVB dimensions depend on the outer layer thickness and the insulation thickness. The maximum values for " S_h " are the same as those indicated for the straight TVH hairpin.

Table 46

d mm		The insulation layer thickness e mm												
		30	40	50	60	70	80	90	100	110	120	130	140	150
60	TVA	3 -140	3 -140		3 -160		4 -200				4 -250			
	TVB	3 -150				4 -175		4 -200			4 -250			
70	TVA	4 -160				4 -200				4 -250				5 -280
	TVB	4 -160			4 -175		4 -200		4 -250				5 -280	
80	TVA	4 -160			4 -200				5 -250			5 -280		
	TVB	4 -160		4 -175		4 -200			The supporting hairpin TVA has to be applied.					
90	TVA	4 -160		4 -200				4 -250	5 -250		5 -280			
	TVB	4 -160		4 -175		4 -200			The supporting hairpin TVA has to be applied.					
100	TVA	4 -160		4 -200		5 -200		5 -250			5 -280			
	TVB	4 -160	4 175		4 -200	The supporting hairpin TVA has to be applied.								
120	TVA	5 -200				5 -250				5 -280			5 -320	
	TVB	The supporting hairpin TVA has to be applied.												

POSITIONING OF THE PANEL TIES

The panel ties are type tested. A special dimensioning of these restraint hairpins is not necessary when they are used in combination with a bearing anchor, manchet or plate anchor if the following situations are observed:



The maximum distance between hairpins must not exceed 1.2 m. For large adhesion forces to the formwork, such as textured finishes, the maximum distance between hairpins must not exceed 0.9 m. The positioning grid for the hairpins must not exceed or fall below the ratio 3:4 or respectively 4:3.

The second hairpin at the diagonal must be double. If a manchet anchor or a plate anchor is placed in that position, the use of a double hairpin can be avoided.

Normally the outer layer projects more than 200 mm. In that case, double hairpins with $d = 4.0$ mm are to be used for the first vertical row.

CONTACT



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