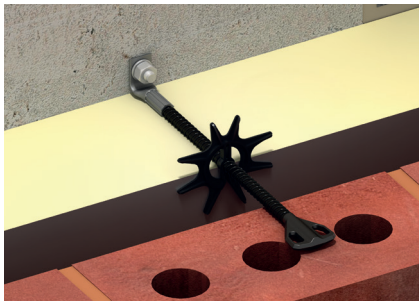


## Ancon Teplo-BFL-Tie

The Teplo-BFL-Tie is ideal where a low thermal conductivity restraint fixing is required between a masonry outer leaf and an in-situ structure. It offers the same thermal benefits as Teplo-BF cavity wall ties (page 9, Ancon Wall Ties & Restraint Fixings brochure), with an additional stainless steel upstand which is mechanically fixed to one end of the tie to allow for a secondary fixing.

The 7mm diameter hole in the upstand suits a variety of fixings, typically an M6 expansion bolt for concrete, a plug and screw for either masonry or concrete, and either an M6 set screw or SDTSS-38-5PT self-drilling screw for steelwork. The load performance will depend on the substrate and on-site pull out tests are recommended to confirm the strength of uncertain or old substrates. For fixing to timber frames we recommend a 5x30 countersunk woodscrew.

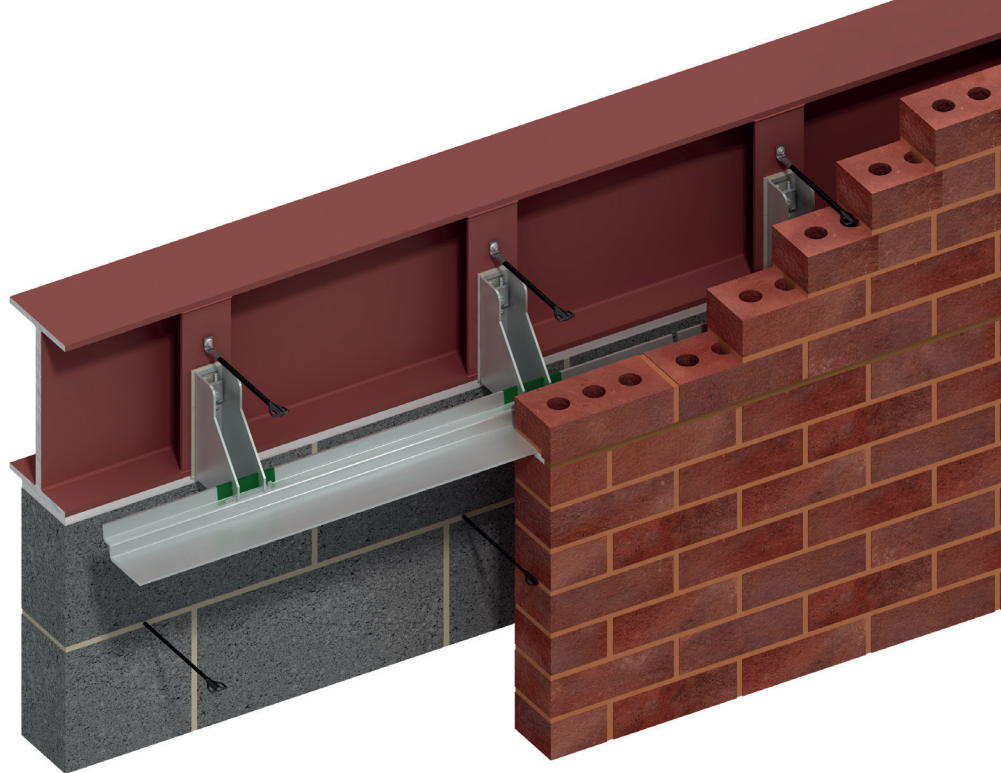
Teplo-BFL-Ties are suitable for cavities from 76mm to 400mm. The range comprises 18 standard products which meet the performance of Tie Types 2 or 3 when installed at a standard spacing of 2.5 ties per square metre; decreasing wall tie centres can increase the performance level as shown in the table.



Teplo-BFL-Tie can be fixed to concrete, masonry, steel and timber

The unique ribbed shank acts as an integral water drip, preventing water crossing the cavity. The Teplo-BFL-Tie can be used with the black Teplo-Clip where insulation is to be retained.

A Lambda value (W/mK) is normally given for Ancon wall ties which expresses the thermal conductivity of the material i.e. 17W/mK for stainless steel ties and 0.7W/mK for basalt fibre Teplo ties, however, as the Teplo-BFL-Tie comprises both materials a Lambda value is not applicable. Instead, to aid with U-value calculations, the table provides the Chi value of an individual Teplo-BFL-Tie and the U-value correction ( $\Delta U$ ) if Teplo-BFL-Ties were installed at the standard spacing of 2.5 ties per square metre (900mm x 450mm centres). BS EN ISO 6946 permits the corrections due to wall ties and air gaps between insulation boards etc, to be omitted from U-value calculations if the corrections amount to less than 3% of the uncorrected U-value of the element.



Ancon Teplo-BF cavity ties and Teplo-BFL-Tie frame cramps used with an Ancon stainless steel brick support system featuring a thermal break



The BBA-approved Ancon Teplo-BFL-Tie is available to suit cavities from 76mm to 400mm



### Teplo-BFL-Tie Product Codes, Recommended Fixing Centres and Chi Values

Product Code	PD 6697 Tie Type	Cavity mm	Tie Length mm	Recommended Spacing mm			Chi-value** W/K	$\Delta U$ , 2.5 ties/m <sup>2</sup> W/m <sup>2</sup> K
				Type 1*	Type 2	Type 3		
Teplo-BFL-7-155	2	76 - 100	155	600 x 450	900 x 450	-	0.000570	0.00143
Teplo-BFL-7-180	2	101 - 125	180	600 x 450	900 x 450	-	0.000450	0.00112
Teplo-BFL-7-205	2	126 - 150	205	600 x 450	900 x 450	-	0.000360	0.00090
Teplo-BFL-7-230	2	151 - 175	230	600 x 450	900 x 450	-	0.000290	0.00073
Teplo-BFL-7-255	2	176 - 200	255	600 x 450	900 x 450	-	0.000250	0.00062
Teplo-BFL-7-280	2	201 - 225	280	600 x 450	900 x 450	-	0.000225	0.00056
Teplo-BFL-7-305	2	226 - 250	305	600 x 450	900 x 450	-	0.000200	0.00050
Teplo-BFL-7-330	2	251 - 275	330	600 x 450	900 x 450	-	0.000175	0.00044
Teplo-BFL-7-355	2	276 - 300	355	600 x 450	900 x 450	-	0.000160	0.00040
Teplo-BFL-7-380	3	301 - 325	380	375 x 450	725 x 450	900 x 450	0.000145	0.00036
Teplo-BFL-7-405	3	326 - 350	405	375 x 450	725 x 450	900 x 450	0.000135	0.00034
Teplo-BFL-7-430	3	351 - 375	430	375 x 450	725 x 450	900 x 450	0.000120	0.00030
Teplo-BFL-7-455	3	376 - 400	455	375 x 450	725 x 450	900 x 450	0.000110	0.00027
Teplo-BFL-5-155	3	76 - 100	155	475 x 450	775 x 450	900 x 450	0.000370	0.00093
Teplo-BFL-5-180	3	101 - 125	180	475 x 450	775 x 450	900 x 450	0.000300	0.00075
Teplo-BFL-5-205	3	126 - 150	205	325 x 450	650 x 450	900 x 450	0.000250	0.00063
Teplo-BFL-5-230	3	151 - 175	230	325 x 450	650 x 450	900 x 450	0.000200	0.00050
Teplo-BFL-5-255	3	176 - 200	255	325 x 450	650 x 450	900 x 450	0.000165	0.00041

**Note:** Centres shown achieve equivalent tie type performances to PD 6697:2019 Table 12. See page 5 of the Ancon Wall Ties & Restraint Fixings brochure for details.

\*Type 1 based on M2 mortar and 2500N Tensile/ 2000N Compressive capacity (PD 6697:2019)

\*\*Based on thermal modelling using design tie embedment and mineral wool in a full fill cavity.