



Hilti (Bulgaria) EOOD

Business Park Sofia, Building 11A, 1766 Sofia, Phone: +359 2 976 0037, Fax: +359 2 974 0123

TEST REPORT

Today, 22 June 2016, in the production facility of STOA OOD located at 61A Kliment Ohridski Blvd, Sofia, we performed tests to determine **the load bearing capacity in the area of slots made in façade panels of materials and thicknesses as shown in the attached drawings provided with holders with wheel-shaped and rectangular inserts.**

Tests were performed on a test bench with holes of 70 mm and 120 mm in diameter which were positioned above the samples, as prepared by STOA OOD, in the area of the inserts placed in the panel slots.

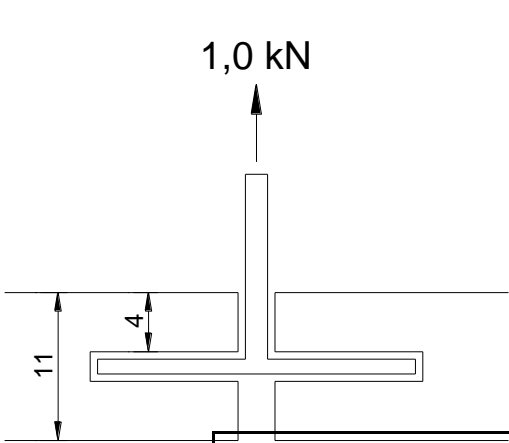
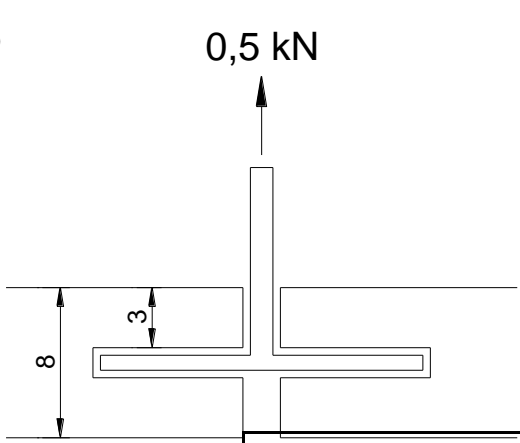
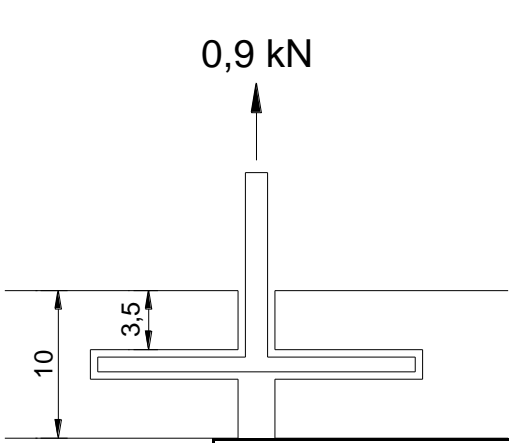
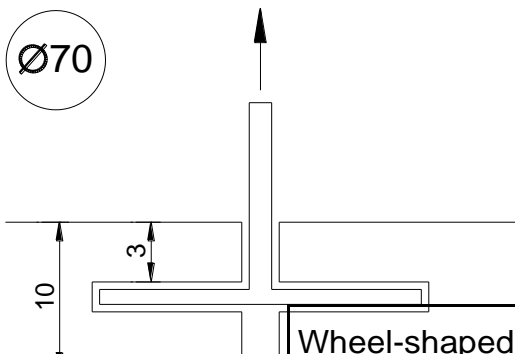
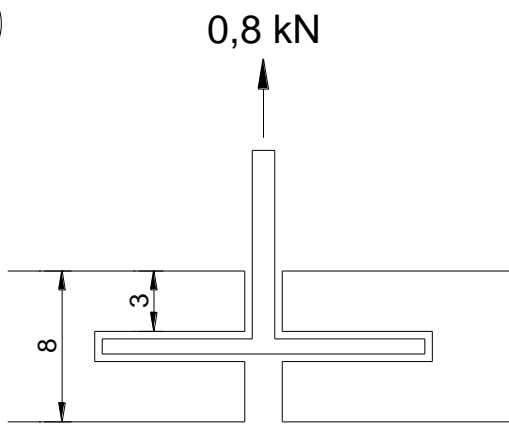
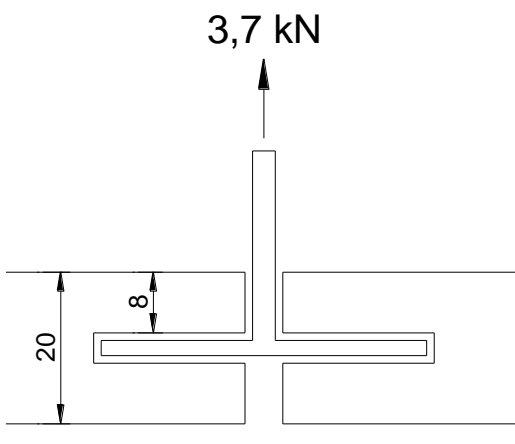


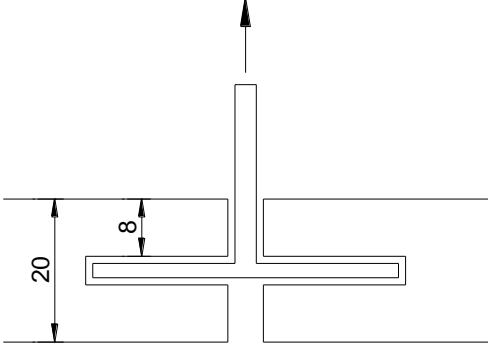
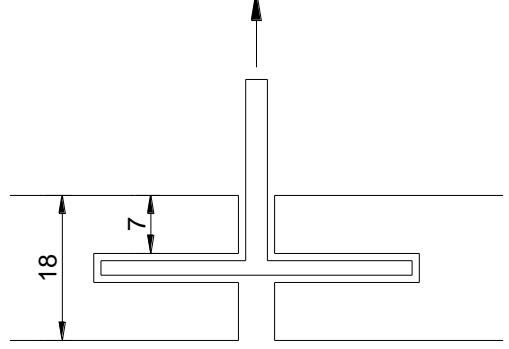
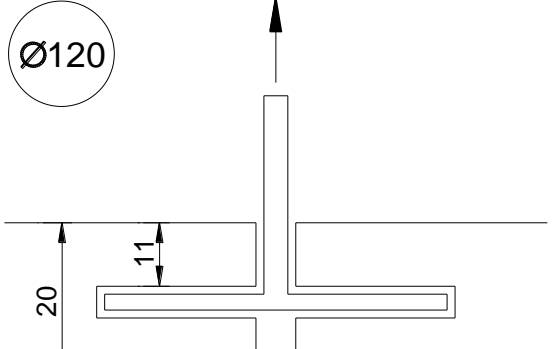
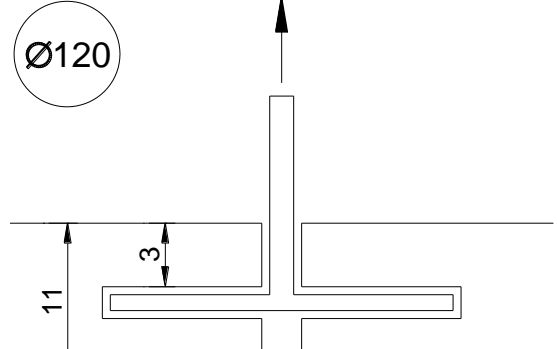
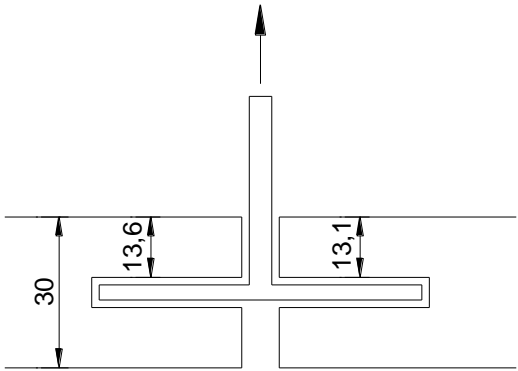
Tests were performed by use of a specialized tester type HAT 28

Tester's serial number: XT 2089E

Tests were performed by the representative of Hilt (Bulgaria) EOOD, Mrs. Kristina Vazgecheva – Consulting Engineer

The results achieved during the tests performed on the façade panels were as follows:

TEST 1	Dry-pressed ceramic Seranit (Riverstone Light)	TEST 2	Dry-pressed ceramic
<p>Ø70</p>  <p>1,0 kN</p> <p>4</p> <p>11</p> <p>Wheel-shaped insert</p>		<p>Ø70</p>  <p>0,5 kN</p> <p>3</p> <p>8</p> <p>Wheel-shaped insert</p>	
TEST 3	Dry-pressed ceramic	TEST 4	Dry-pressed ceramic
<p>Ø70</p>  <p>0,9 kN</p> <p>3,5</p> <p>10</p> <p>Wheel-shaped insert</p>		<p>Ø70</p>  <p>0,5 kN (cracking)</p> <p>0,8 kN (breaking)</p> <p>3</p> <p>10</p> <p>Wheel-shaped insert</p>	
TEST 5	Dry-pressed ceramic	TEST 6	Granite (Asia Black)
<p>Ø70</p>  <p>0,8 kN</p> <p>3</p> <p>8</p> <p>Wheel-shaped insert</p>		<p>Ø70</p>  <p>3,7 kN</p> <p>8</p> <p>20</p> <p>Wheel-shaped insert</p>	

TEST 7	Limestone (Vratsa)	TEST 8	Opal
<p>Ø120</p> <p>1,95 kN</p>  <p>Wheel-shaped insert</p>		<p>Ø120</p> <p>2,4 kN</p>  <p>Wheel-shaped insert</p>	
TEST 9	Granite (Asia Black)	TEST 10	Dry-pressed ceramic Seranit (Riverstone Light)
<p>2,0 kN (cracking)</p> <p>2,8 kN (breaking)</p> <p>Ø120</p>  <p>Wheel-shaped insert</p>		<p>0,4 kN (cracking)</p> <p>0,8 kN (breaking)</p> <p>Ø120</p>  <p>Rectangular insert</p>	
TEST 11	Limestone (Vratsa)		
<p>Ø120</p> <p>3,4 kN</p>  <p>Rectangular insert</p>			

Executed by:
Kristina Vazgecheva
Consulting Engineer
Hilti (Bulgaria) EOOD

Date: 22 June 2016

I, the undersigned Kostadin Yordanov Kostadinov hereby certify the accuracy of the translation made
by me from Bulgarian language into English language of the document enclosed herein, namely:
Hilti Test Report about Panel Holders No. - dated 22 June 2016
Translator: (Kostadin Yordanov Kostadinov) This translation contains four page(s).