# HTA120 PROMOTION BROCHURE

# High Temperature Rated Silicone Sealant/Adhesive

HTA120 is a Flexible elastomeric adhesive sealant. HTA120 will bond to a wide range of substrates. HTA120 is a Temperature Rated Silicone Adhesive and Sealant used for application where sealing or fixing of materials is required – to form a high heat resistant joint or bond. Other features include high flexibility, excellent water/weather resistance (see independent test reports), fixing of materials with differing thermal expansion characteristics. HTA120 has been fully tested for use on both steel and concrete substrates.



### **Quality Assurance**

HTA120 is a material whose usability has been documented by the ASFP (Association for Specialist Fire Protection) operating in the United Kingdom.



### Health, Safety and Enviroment

Unlike conventional anchoring applications, substances that cause serious health problems such as silica dust are not released during the HTA120 application. Again, unlike conventional anchoring applications, HTA120 does not require hot application, thus minimizing occupational safety risks. HTA120 is RoHS compliant.



### **VOC Content**

1.1% (percent by weight) of components (11 g/l) are considered VOCs under:

24 November 2010 EUROPE
PARLIAMENT AND COUNCIL DIRECTIVE.

1.5% (percent by weight) of components (16 g/l) are considered VOCs under:

DIRECTIVE 2004/42/CE OF THE EUROPEAN PARLIAMENT AND COUNCIL of 21 April 2004.





### **Cost Analysis**

Thanks to its ease of application, HTA120 provides a great advantage in costs arising from time and labor.

Costs such as expertise/mastery and heavy equipment usage required in classical fastening methods are not needed in HTA120 applications

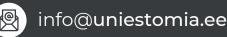
There is no need for heating during the application of HTA120. For this reason, while saving on equipment costs arising from occupational health and safety regulations, possible occupational accidents are prevented.



### **Industries**

The main industry of HTA120 are used petrochemical facilities and tunnel construction projects. In addition, it is used in high temperature furnaces, silos, rock wool, rabis assemblies, thermal insulation blankets, metal or concrete surfaces, insulation coating adhesives in high temperature environments, fire resistant adhesives; and all similar environments and application areas.

HTA120 has proven to be a strong fixing element and fire preventer in areas with high fire risk, in terms of the tests it has been subjected to and the projects it is currently used in.



### **Concrete Surface Application Examples**

### **Steel and Plastic Surface Application Examples**











### **Certificates**

The tests that the HTA120 was subjected to are listed below. You can contact us to reach all the documents of the test results.

1.ASFP

2.Jet Fire Test

3.Nestaan Y747

4.Indicative Deck Head Fire Test H60

5.Indicative Bulkhead Fire Test H60

6.Cellulosic Fire Test

7. Hydrocarbon Fire Test

8.Tensile Pull-Off Testing

### **Intumescent Chemicals Ltd**

**CELLULOSIC FIRE TEST** 

### Conclusion

This series of tests was to determine the impact of a joint in the Conclad board, and to see if the Conclad 120 HC could withstand hydrocarbon testing.

From the thermal data, and structural analysis, this product performed well.

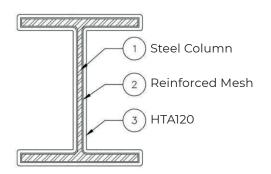
In our opinion the data recorded would show, on a concrete slab if similar structure should have reached between 400-600°C within 120mins of exposure. Subject to full scale testing, this system should meet building regulation requirements.

Test Engineer: J. Garrigan Laboratory Manager
Date: April 2018.
Witness to testing: Andy Topham & Kevin Grover

Updated Report Date: 13.10.2021.

### **NESTAAN Y747**

FIRE TEST ANSI/UL 263



Rating Hr	Size W10 x 49	Size W16 x 36	
	HP/A = 160	HP/A = 223	
	Min Thkns, mm	Min Thkns, mm	
2	36	38	
3	50	54	



(R + 61.28)

T=

(61.706 \* (W/D) + 113.202)

T = Required Thickness (1/2 to 2-1/16 inch)

R = Fire Resistance Rating (60 - 240 min.)

D = heated perimeter of steel column in inches

W = Weight of steel column in pounds per linear foot

W/D = Shape Factor of Column (0.338 to 2.55)

### **Hourly Rating**

Column Size	W/D	1 Hr+	1-1/2 Hr+	2 Hr+	2-1/2 Hr+	3 Hr+	4 Hr+
W6x9	0.338	11/16"	7/8"	1-1/8"	1-3/8"	1-5/8"	2-1/16"
W10x49	0.84	1/2"	11/16"	13/16"	1"	1-3/16"	1-1/2"
W14x233	2.55	1/2"	9/16"	11/16"	3/4"	7/8"	1-1/16"

**TEST CONSULT** 

PULL-OFF TEST | 16974/IR4923

Test Location	Perforated Plate size (50 mm x 50mm)	Tensile Load Area (mm²)	Achieve pass level of 20Kg Force (0.196kN)	Actual pull-off load to destruction Kg Force	Actual pull-off force to destruction kN	Tensile Stress N/mm <sup>2</sup>
1	✓	2500	<b>✓</b>	108.0	1.06	0.42
2	✓	2500	✓	79.7	0.78	0.31
3	✓	2500	✓	79.7	0.78	0.31
4	✓	2500	✓	93.4	0.92	0.37
5	✓	2500	✓	92.1	0.90	0.36
6	✓	2500	✓	85.7	0.84	0.34
7	✓	2500	✓	87.0	0.85	0.34
8	✓	2500	✓	91.3	0.90	0.36
9	✓	2500	✓	87.0	0.85	0.34
Average	-	2500	-	82.33	0.88	0.35
Cumulative load for all 9 pins			803.9	7.89	3.15	

Ref:	Disc Dimension (mm)	Tensile Load Area (mm²)	Pull-Off Force (kN)	Tensile Stress (N/mm²)	Comment
1	50 x 50	2500	1.06	0.42	Pass
2	50 x 50	2500	0.78	0.31	Pass
3	50 x 50	2500	0.78	0.31	Pass
4	50 x 50	2500	0.92	0.37	Pass
5	50 x 50	2500	0.90	0.36	Pass
6	50 x 50	2500	0.84	0.34	Pass
7	50 x 50	2500	0.85	0.34	Pass
8	50 x 50	2500	0.90	0.36	Pass
9	50 x 50	2500	0.85	0.34	Pass
Average	50 x 50	2500	0.88	0.35	

# **Bulkhead Testi**



## **Deck Head Testi**



### **Cellulosic Fire Test**



