

## **VEDAFEU C<sup>©</sup> ROPE**



The most extensive range in expansion joints firestop.





FIRE STOP 4HRS **EI 240** 

MOVEMENT + 20 %

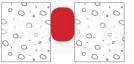
JOINT WIDTH **10** to **200** mm

#### TESTED CERTIFIED

### **VEDAFEU C<sup>®</sup> ROPE STRENGTHS**

#### **POSITIONS**

Tested and certified for horizontal and vertical applications.



Horizontal position



Vertical position

#### **EXPOSURE**

Tested and certified not exposed or exposed to fire.



Not exposed to fire



Exposed to fire

#### COMPRESSIBILITY

Tested and certified up to - 80% compression.



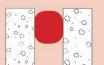
Initial joint



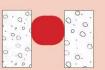
With compression

#### **EXPANSION MOVEMENT**

Tested and certified up to **+ 20%** expansion.



Initial joint



With movement

#### **APPLICATIONS**

Hospitals, industrial buildings, offices, housing, hotels, malls, carparks, schools, train stations, airports, stadiums...





## OFFICIAL CLASSIFICATION

PV n° RS 08-162/A dated 15/12/2010

EI 240 - H - M20 - B - W 10 to 200

PV n° 11-A-441 dated 25/07/2011

EI 240 - V - M20 - B - W 20 to 120

#### Rope diameter according to initial joint width

with movement (M) + 20% according to mentioned above report.

| Initial joint width<br>[mm]           | 10 | 20 | 40 | 60 | 80  | 100 | 120 |
|---------------------------------------|----|----|----|----|-----|-----|-----|
| Ø rope<br>VEDAFEU C <sup>©</sup> [mm] | 12 | 30 | 60 | 90 | 120 | 150 | 180 |

VEDAFEU  $C^{\circ}$  has also been tested and approved with movement of +7,5%. Others classification reports available upon request : with sealant, with joint cover, exposed to fire, with waterproofing membrane, etc.

### **CERTIFIED CONFIGURATIONS**





# **VEDAFEU C<sup>©</sup> PROPERTIES**

#### **VEDAFEU C<sup>©</sup> firestop rope COMPRESSIBILITY tests**

| Ref.                            | Test    | Load F (kN) and<br>VEDAFEU C <sup>©</sup><br>thickness Øc (mm) | Compressibility | Immediate<br>form<br>recovery | After 2 hours form recovery | After 72 hours<br>form<br>recovery |
|---------------------------------|---------|--|-----------------|-------------------------------|-----------------------------|------------------------------------|
|                                 | 1       | F = 4 kN<br>Øc = 16 mm   | 69 %            | 83 %                          | 88 %                        | 90 %                               |
| VEDAFEU C <sup>©</sup><br>Ø 60  | 2       | F = 50 kN<br>Øc = 8 mm   | 83%             | 78 %                          | 84 %                        | 86 %                               |
|                                 | 3       | F = 5 kN<br>Øc = 16 mm   | 70%             | 76 %                          | 87 %                        | 91 %                               |
|                                 | AVERAGE |  |                 | 79 %                          | 86 %                        | 89 %                               |
| VEDAFEU C <sup>®</sup><br>Ø 100 | 1       | F = 30 kN<br>Øc = 16 mm  | 81%             | 55 %                          | 69 %                        | 74 %                               |
|                                 | 2       | F = 30 kN<br>Øc = 17 mm  | 80%             | 62 %                          | 69 %                        | 71 %                               |
|                                 | 3       | F = 30 kN<br>Øc = 14 mm  | 85 %            | 57 %                          | 62 %                        | 63 %                               |
| Îl                              | AVERAGE |  |                 | 58 %                          | 67 %                        | 69 %                               |
|                                 | 1       | F = 100 kN<br>Øc = 19 mm                                       | 86 %            | 54 %                          | 55 %                        | 72 %                               |
| VEDAFEU C <sup>©</sup><br>Ø 150 | 2       | F = 100 kN<br>Øc = 17 mm                                       | 88 %            | 56 %                          | 57 %                        | 67 %                               |
|                                 | 3       | F = 100 kN<br>Øc = 17 mm                                       | 88 %            | 68 %                          | 71 %                        | 81 %                               |
| AVERAGE                         |         |  | 87 %            | 59 %                          | 61 %                        | 73 %                               |



| Thermal conductivity at average temperature | Tm | 50    | 100   | 200   | 300   | 400   | 500   | °C   | DIN   |
|---|----|-------|-------|-------|-------|-------|-------|------|-------|
|   |    | 0.041 | 0.049 | 0.073 | 0.096 | 0.136 | 0.144 | W/mK | 52612 |



The thermal value of Lambda VEDAFEU C<sup>©</sup> fire barrier backer rod is about 0.035 W/mK at 10°C and 0.040 W/mK at 50°C. The thermal resistance R (m<sup>2</sup> K/W) is calculated by the ratio of the thickness of insulation on Lambda.

## **VEDAFEU C<sup>©</sup> ACOUSTICAL Properties**In accordance with the NRA (New Acoustical Regulation 2012)

| Acousting absorption (αs)   | 125  | 250  | 500  | 1000 | 2000 | 4000 | Internal     |
|---|------|------|------|------|------|------|--------------|
| according to frequencies (Hz) for a<br>diameter from 30 to 180 mm | 0.10 | 0.16 | 0.38 | 0.51 | 0.59 | 0.61 | measurements |







## **VEDAFEU C<sup>©</sup> ROPE**

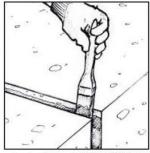
Installation instructions for joint width from 10 to 120 mm



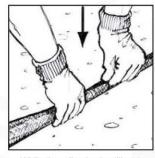


If necessary, remove formwork material such as polystyrene, honeycomb cardboard, etc.

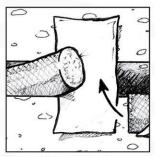
The contact surfaces must be clean, dry and free from contamination. Remove dust, using a brush or a broom.



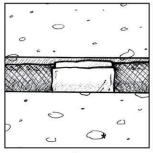
Apply a layer of VEDACOLLE C with a brush on both sides of the joint.



While the adhesive is still wet, insert VEDAFEU C<sup>®</sup> and firmly press it by hand till perfect fit.



Linking of 2 lengths (patented).



VEDAFEU C<sup>©</sup> with junction.

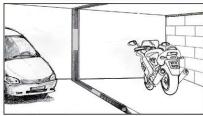
For installation accessories, please refer to the concerned classification report.

### **EXAMPLES OF APPLICATION**

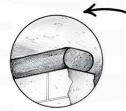




#### Head of wall



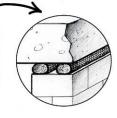
Application on floor, wall, ceiling with junctions.



A single rope on head of wall.



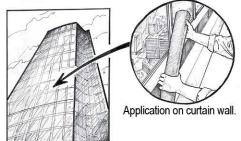
Application in carpark.



Double rope on head of wall.



#### **Curtain wall**







Windows and doors frames, bearings protection, through-penetrations, ...