

Colflex HN

Ready to use sealing system for cracks and joints subject to a large dilatation. Colflex HN is a high quality joint sealing system combined with Multitek Adhesive 2-component epoxy glues.



• field of application

- Sealing system for concrete joints subject to negative water pressure.
- Sealing moving joints such as expansion joint.
- Sealing joints which are leaking under positive or negative water pressure.
- Treatment of isolated cracks in concrete and as drains in underground waterproofing.
- Sealing expansion joints and cracks in chemical containment basins.

• advantages

- No special cleaning or activation required.
- Colflex HN can be applied to both wet and dry surfaces using Multitek Adhesive SD (dry) or Multitek Adhesive SDW (wet) 2-component epoxy glues.
- Multitek adhesives have fast curing times, even at low temperatures.
- Colflex HN can be used for joints or cracks with large dilatations.
- The combination remains elastic, even at low temperatures.
- Weather and water resistant.
- Colflex HN has excellent chemical and temperature resistance^(*).
- Multitek Adhesive glues have a very high adhesion to most construction materials.
- Fast and easy to use.

• description

Colflex HN is an elastic sealing tape made of NBR rubber and has a uniform grey textured appearance.

Colflex HN sheet thickness is 1,2 mm. Standard widths are 100 or 200 mm. Colflex HN is supplied on 20 m rolls.

Colflex HN has a double row of 3 mm offset anchoring perforations every 1 cm at 5 mm from the edge.

The Colflex HN system is applied using Multitek Adhesive SD (dry surfaces) or Multitek Adhesive SDW (wet surfaces) 2-component epoxy glues.

• application

Colflex HN should be applied to a level and dust-free surface. Concrete surfaces need to be at least 28 days old. During application, water pressure on the tape should be avoided. Eventual water pressure needs to be relieved through placing drains using fast setting cement type Aquatek Plug or Aquatek Plug XF.

1. Application procedure

Preparation of the joint

- The joint edges need to be clean and sound. This can be achieved by brush or sandblasting.
- Remove dust, dirt and loose particles with compressed air or brush.

Preparation of Colflex HN

- Colflex HN sheet needs to be clean and free of grease or dust before application.
- In case cleaning of the Colflex HN sheet is needed, this can be done using Multitek Cleaner and a clean lint free cloth.
- Apply a strip of masking tape to the centre of the Colflex HN sheet.

Preparation of the glue

- Multitek Adhesive SD/SDW is supplied as pre-weighted kits.
- Empty B-component completely into A-component (large pail).
- Mix thoroughly until a uniform colour is achieved. Mix with an electric or pneumatic mixer at low speed (approx. 500 rpm).

Application of the glue

- Apply a strip of masking tape to the edges of the joint to be treated. The tape should be applied 2 cm besides the edges of the Colflex HN sheet.
- Apply Multitek Adhesive SD/SDW to the edges of the joint.
- Thickness of the layer may vary from 1 to 2 mm depending on the surface texture.

Application of the tape

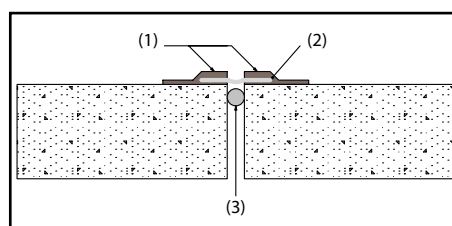
- Apply Colflex HN within 30 min onto the layer of glue. Press the tape down firmly until glue comes through the anchoring perforations.
- Apply a second layer of glue 1 to 2 mm thick on top with an overlap of at least 2 cm over both edges.

Finishing the joint

- Remove the tape in the middle of the Colflex HN sheet before the glue has set.

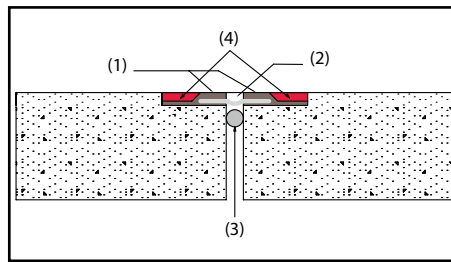
Connection between 2 ends of Colflex HN

- Colflex HN can not be welded with a hot air blower or chemical welding.
- Colflex HN roll ends are jointed using MS Fixer.
- An overlap of at least 10 cm needs to be provided. Make sure to align the anchoring perforations in the tape.
- Colflex HN roll ends need to be jointed before application of the joint into the Multitek Adhesive epoxy.
- Remove the masking tape from the overlap and thoroughly clean and degrease the overlap sides with Multitek Cleaner.
- Apply a layer of 1 mm thick MS Fixer over the entire overlap surface of the bottom Colflex HN tape.
- Apply the second roll end into the fresh applied MS Fixer and press down with a non-adhering roller removing all entrapped air from underneath the top roll end.
- Reapply the masking tape in the middle of the joint and in the middle of the second roll length.
- Apply the jointed Colflex HN with Multitek Adhesive SD/SDW according to the procedure above.
- When the application of the complete system is done, after removal of the masking tape strip, apply a thin layer of MS Fixer to all visible roll end joints and smoothen.



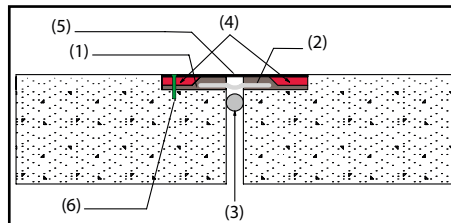
- (1) Multitek Adhesive SD/SDW.
- (2) Colflex HN
- (3) Backer rod

Fig.1. Typical expansion joint solution with Colflex HN tape on top of surface.



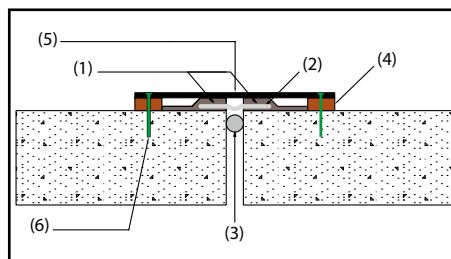
- (1) Multitek Adhesive SD/SDW.
- (2) Colflex HN
- (3) Backer rod
- (4) Epoxy mortar

Fig.2. Typical expansion joint solution with Colflex HN tape recessed into surface.



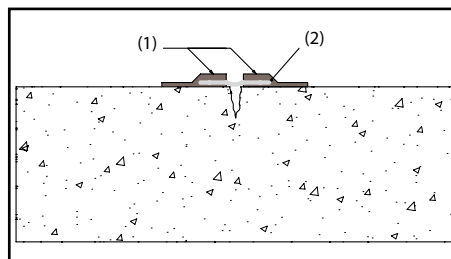
- (1) Multitek Adhesive SD/SDW.
- (2) Colflex HN
- (3) Backer rod
- (4) Epoxy mortar
- (5) Steel or aluminium board
- (6) Mechanical fixation

Fig.3. Typical expansion joint solution with Colflex HN tape recessed into the surface and a protective board for trafficated joints. The board is only fixed to one side of the joint.



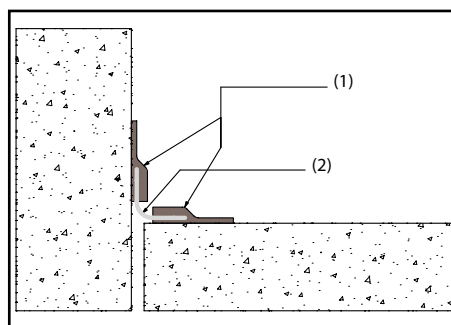
- (1) Multitek Adhesive SD/SDW.
- (2) Colflex HN
- (3) Backer rod
- (4) Spacer
- (5) Steel or aluminium board
- (6) Mechanical fixation

Fig.4. Typical expansion joint solution with Colflex HN tape on top of the surface and protected from mechanical damage by a protective board.



- (1) Multitek Adhesive SD/SDW.
- (2) Colflex HN

Fig.5. Application of Colflex HN to seal a moving crack.



- (1) Multitek Adhesive SD/SDW.
- (2) Colflex HN

Fig.6. Wall to floor or ring beam joint sealing with Colflex HN.

• technical data/properties

Property	Value	Norm
Colflex HN		
Thickness	1,2 mm	ASTM D412
Weight/surface	1,22 kg/m ²	
Colour	Grey	
Tensile strength		
• Longitudinal	8,1 N/mm ²	ISO 527
• Transversal	8,5 N/mm ²	ISO 527

Elongation at break		
• Longitudinal	440 %	ISO 527
• Transversal	360 %	ISO 527
Hardness Shore A	65	
Angle tear resistance	10,8 N/mm	ISO 34-1
Anchoring perforations	Double row of 3 mm offset anchoring perforations every 1 cm at 5 mm from the edge.	
Multitek Adhesive	SD	SDW
Density	1,8 kg/dm ³	
Adhesion to dry concrete	Surpasses concrete cohesion.	ISO 4624
Adhesion to wet concrete	Not applicable.	Surpasses concrete cohesion.
Adhesion to steel	11 N/mm ²	
Compressive strength	60 N/mm ²	65 N/mm ²
Flexural strength	35 N/mm ²	
Pot life (100 g / 21°C)	1,5 hours	
Complete curing	7 days	
Minimal application temperature	8°C	
Form change during curing	None	

• **appearance**

Colflex HN : Grey rubber sheet with anchoring perforations and textured surface.

Thickness : 1,2 mm.

Width : 100-200 mm standard.

• **consumption**

Colflex HN: 1 m per linear meter of treated joint Multitek Adhesive Colflex HN 100 mm.

• 0,8 kg/linear m joint (2 mm bottom layer, 1 mm top layer).

• 1,1 kg/linear m joint (2 mm bottom layer, 2 mm top layer).

Colflex HN 200 mm.

• 1,3 kg/linear m joint (2 mm bottom layer, 1 mm top layer).

• 1,7 kg/linear m joint (2 mm bottom layer, 2 mm top layer).

Overlap 10 cm width MS Fixer

Colflex HN 100 mm : 15 g/10 cm overlap.

Colflex HN 200 mm : 30 g/10 cm overlap.

• **packaging**

Colflex HN rolls in cardboard box.

• Width : 100-200 mm.

• Length : 20 m.

• **storage**

Colflex HN unlimited in a dry place.

Multitek Adhesive SD/SDW should be stored in the original packaging in a dry area. Storage temperatures must be between 5°C and 30°C. Once a pail has been opened, the useful life of the material is greatly reduced and should be used as quickly as possible.

Shelf life: 1 year.

• **health & safety**

Epoxy resins and solvents can irritate skin and mucous membranes.

Always wear rubber gloves and protective goggles. In case of splashes in the eyes, rinse abundantly with water and contact a physician.

For additional information, consult the relevant MSDS.

(*) For chemical resistances contact a De Neef representative.