

## MASTERSEAL NP 474 (MASTERFLEX 474)

Polyurethane based single part elastomeric joint sealant.



### Description of the Product:

**MASTERSEAL NP 474** is a polyurethane based elastomeric joint sealant resistant to weather conditions, UV rays, and degradations caused by chemical substances in the atmosphere.

### Fields of Application:

- Interior and exterior areas for vertical and horizontal applications
- Joints of structures that are above ground
- Restoration of old and new buildings
- Parapet corners on roofs and terraces
- Joints of prefabricated elements
- Between precast wall panels
- Moving joints up to 25%
- Precast rain gutter, roof drain pipes, and parapet joints
- Joints of PVC or aluminum sidings
- To prevent leakage in aluminum, metal, PVC, and wooden woodworks and in junction details.

### Features and Benefits:

- Easy and quick application.
- Single part.
- Ready to use.
- Moisture curing.
- Highly flexible.
- Enables perfect bonding on concrete, stone, metal, wood and other construction materials.
- Can be applied on many surfaces without primer.
- Weather conditions do not change its physical properties during service period.
- Limited chemical resistance.

### Restrictions:

Do not apply **MASTERSEAL NP 474** on substrates below +5°C and above +35°C.

**MASTERFLEX 474** is not recommended to apply:

- for swimming pool joints, which are constantly under high pressure water,
- for compensation joints for glazing,
- for movable joints, covered with paint,
- for joints, which are under exposure,

### Joint Design:

In joints where **MASTERSEAL NP 474** will be applied, recommended width of the joint must be between 10 mm to 30 mm and depth 10 mm to 15 mm. Please refer to coverage table for joint depths (Approximately: depth/width=1/2).

Movements of the joints must not exceed  $\pm 25\%$  of joint width

| Joint depth | Joint width |         |         |         |         |
|-------------|-------------|---------|---------|---------|---------|
|             | 10.0 mm     | 15.0 mm | 20.0 mm | 25.0 mm | 30.0 mm |
| 10.0mm      | 6.00 m      | 4.00 m  | 3.00 m  |         |         |
| 12.5mm      |             |         |         | 1.92 m  |         |
| 15mm        |             |         |         |         | 1.33 m  |

\* In the case of constructions, strongly absorbing heat (dark color), the width should be increased by 10 - 30%

\*\* In the case of constant chemical exposure or permanent presence of water filling depth should increased by 20%.

### Consumption:

MASTERFLEX 474 consumption depends on joint width and depth of its filling. When the joint's width is 10 mm and its filling depth is 10 mm, consumption of **MASTERFLEX 474** is 100 ml per meter of the joint, which allows you to seal 6 meter of joints with 1 sausage.

**Application Procedure****Preparation of Substrate:**

Joints must be dry, sound and free from dust and other contamination. Remove oil stains and grease from the substrate with the universal thinner. Irregularities on the surface must be repaired with **MASTERBRACE ADH 1406**. Apply masking tape on the outer sides of the joint to prevent staining.

Remove rust on the metal substrate. Remove oil stains and grease from the substrate with a suitable oil remover. Do not allow flash rusting of the surface. Fill deep joints with closed cell polyethylene backer rod which must not be damaged during the application. Do not use backer rods containing bitumen or tar.

**MASTERSEAL NP 474** can be applied on most old and new painted woods. However, old woodworks have to be cleaned from swelled old paints and sandpapered until a smooth surface is obtained.

**Primer Application:**

**MASTERSEAL NP 474** can be applied on many surfaces without priming. However, under special circumstances during the application, **MasterSeal P 147** (on absorbent surfaces) and **MasterSeal P 137** (on non-absorbent surfaces) can be used as primer.

**Sealant Application:**

Place **MASTERSEAL NP 474** sausage in a suitable sausage gun. Cut the top of the sausage. Fix the nozzle hoop and cut the nozzle as desired. Apply **MASTERSEAL NP 474** starting from the bottom to the top. Avoid air entrapping. Smooth the surface with a suitable jointing tool remove masking tape from the surface. Place **MASTERSEAL NP 474** cartridge in a suitable gun. Cut the nozzle as desired. Apply **MASTERSEAL NP 474** starting from the bottom to the top. Avoid air antrapping. Smooth the surface with a suitable jointing tool remove masking tape from the surface.

**Packaging:**

600 ml sausage.

**Storage:**

Must be stored in a cool and dry warehouse protected freezing and sunlight.

**Technical Data:**

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Material                            | polyurethane                          |
| Density                             | ~ 1,3 g/sm <sup>3</sup>               |
| Joint width                         | 5 to 30 mm                            |
| Application temperature             | + 5 - + 35°C (foundation temperature) |
| Temperature resistance              | -30 - + 80°C                          |
| Curing time*                        |                                       |
| -layer formation after              | ~ 45 min                              |
| -pedestrian loads after             | ~ 24 hours                            |
| -traffic loads after                | ~ 4 days                              |
| Elongation at break (ISO 8339)      | up to 450%                            |
| Recoverability                      | up to 80%                             |
| Possibility of continuous expansion | ~ 20%                                 |
| Shore A hardness                    | ~ 30                                  |
| Elasticity module at 20°C (ISO 37)  | ~ 0,45 N/mm <sup>2</sup>              |

\* Obtained in +23°C, 50% relative humidity conditions.

Higher temperatures decrease the time, lower temperatures increase the time.