



## INTRODUCTION:

**ARMOURTUFF® P2119** is a spray applied pure polyurea coating with fast curing properties, offering the following:

- Excellent mechanical, chemical, thermal, and weather resistance properties, as it is based on pure, elastomeric and hydrophobic polyurea.
- A uniform, elastic, waterproof without forming seams or joints.
- Excellent bonding to various substrates like concrete, steel, and most waterproofing layers.
- Applicability, even on irregular substrates.
- Suitability for green roofs, flower beds, etc.
- Can be applied at 1 to 5 mm thickness in a single application
- Medium elongation.

## Unique Features:

- Superior flexibility
- High Hardnes
- Bridges substrate crack up to 2mm
- Long term crack resistance
- Superior freeze/thaw resistance
- Self-curing
- Very low shrinkage
- Non-toxic

## AREA OF USES:

**ARMOURTUFF® P2119** is ideal waterproofing for:

- Concrete Basement and Raft
- ETP/STP/Waste Garbage Plant/Waste Water Treatment Plant
- Bridge Piers
- Bridge Service Ducts
- Culverts
- Parking floors, Podium, Warehouse Flooring, Pipe Coating, Terrace Garden.

## ADVANTAGES:





**SIMPLE PACKAGE:** Material is pre-packaged in a convenient and easy to handle size.

**ADHESIVE:** Excellent adhesion to steel and sound prepared concrete substrates.

**QUICK DRYING:** Typically touch dry in less than 10 seconds.

**SAFE:** Non-toxic when cured, nonhazardous, solvent and plasticizer free.

**IMPERMEABLE:** Very high resistance to water permeability and diffusion to carbon dioxide gas.

### TECHNICAL DATA:

PROPERTIES	RESULTS
Chemistry	100% Pure Polyurea
Open Time	8 seconds @ 25 °C
Tensile Strength	21 N/mm <sup>2</sup>
Coverage	1.07 to 1.10 Kg/m <sup>2</sup> for 1 mm thickness
Water Permeability, DIN 1048	Nil at 7 bar of hydrostatic pressure
Water Vapour Permeability	<0.4 gm/m <sup>2</sup> /day
Colour	Gray, White
Shore D Hardness	60
Elongation,%	190%
Expected Working Life	50 years
Climatic Zone	S (Severe)
Shelf Life	6 months from date of manufacturing

### OTHER MATERIAL REQUIRED:

1. Primer: **Multithane® Primer 21/ Aquablock® Primer**
2. Repair of Floor/wall: **FloorTop® EP**, epoxy based repair mortar
3. Joint Treatment Scheme: Primer as **Bondcoat® AC**, Repair Mortar as **PrimeMix® RM**

### APPLICATION DATA:

#### SURFACE PREPARATION

In general, the substrate must be dry (moisture content < 4%), clean, free of grease, loose particles, dust etc.

#### Concrete substrates

Any existing cavities in concrete should be filled with the appropriate repairing materials in advance. Use **FloorTop® EP** for repair of concrete surface and joints.



Intense cracks on the substrate must be primed locally and after 2-3 hours (depending the weather conditions) must be sealed with the polyurethane sealants **MULTIFLEX PU** or **FLOORTOP® EP**.

## PRIMING

Concrete and other porous surfaces with moisture content < 4% should be treated with the special primer **MULTITHANE PRIMER 21**, at a consumption of approx. 200 g/m<sup>2</sup>.

Surfaces with moisture content > 4% should be primed with the special two component epoxy primer **AQUABLOCK PRIMER**, at a consumption of 100-200 g/m<sup>2</sup>.

## PLACING

### Concrete

Before the application, concrete should be completely cured or 28 days old. Apply **ARMOURTUFF® P2119** at uniform thickness by suitable spray machine.

### Metal/Steel

Metal surface need to sand blasted to get near white surface. The surface profile will give adequate mechanical adhesion. If primer is required (for porous surface) then it should be applied within 8 hours of sand blasting to avoid flash rusting.

## CLEANING:

All tools should be cleaned/flushed with solvent immediately after use.

## STORAGE:

Store in dry, frost-free conditions at moderate temperature not **greater** than 25 °C.

## PACKING:

Pack Size: 200 lit pack each.

## SAFETY DATA:





- Irritating to eyes, respiratory systems and skin.
- Risk of serious damage to eyes.
- Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice.
- After contact with skin, wash immediately with plenty of clean water.
- Wear suitable protective clothing, gloves and eye/face protection.

## WARRANTY

Multichem warrants Multiguard **ARMOURTUFF® P2119** to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of **ARMOURTUFF® P2119**.

Because the Multichem does not perform the actual installation, it cannot be held responsible for the results of the application. Multichem specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques.

This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Multichem part. Multichem neither assumes nor authorizes any person to assume for Multichem any liability in connection with the sale and installation of **ARMOURTUFF® P2119**.

Because of constant improvement of manufacturing techniques and formulations, Company reserves rights to change this datasheet and its contents without prior notice.