# BİTÜWAP 9551 SHIELD PU BITUMEN TG 2 – K TECHNICAL SPECIFICATIONS

## TWO COMPONENT, POLYURETHANE AND BITUMEN BASED VERTICAL JOINT SEALANT

### DESCRIPTION FOR IT

It is a high performance, two component, bitumen enriched, thixotropic, polyurethane based joint sealant developed for vertical joints. It adheres strongly to almost any type of surface, forming a highly elastic layer. It offers excellent resistance to chemicals and mechanical stresses. Its composition is based on elastomeric hydrophobic polyurethane resin, reinforced with chemically polymerized pure bitumen. It exhibits excellent durability against varying climatic and thermal conditions. In addition to providing effective waterproofing, it demonstrates superior resistance to chemicals and other destructive agents.

### AREAS OF USE

It is used for waterproofing vertical joints, airport runway joints, cement, metal, or fiber roofs, water tanks (excluding potable water tanks), floors, foundations, bridge decks, cut and cover tunnels, and irrigation canals.



### ADVANTAGES

It cures rapidly. It can be applied in thick layers without forming bubbles. Unmixed components remaining after application can be stored for future use. Due to its low modulus, it offers excellent crack bridging properties. It exhibits effective resistance to chemicals. Although thinning is not required, it can be diluted with polyurethane thinner depending on conditions. It has excellent thermal resistance; the product does not soften. The maximum service temperature is 80°C, and the maximum thermal shock temperature is 200°C. It is resistant to cold, maintaining its elasticity down to -40°C. It possesses excellent mechanical properties and functions effectively as a water vapor barrier.

### APPLICATION CONDITIONS

The ambient humidity must not exceed 80%, and the application temperature (ambient and surface) must be between +3°C and +35°C. For outdoor applications, there must be no rain 24 hours prior to, during, and 24 hours after the application. The surface temperature must be at least 3°C above the current dew point temperature.

### TOOLS USED

Hand mixer, trowel.

### SURFACE PREPARATION

The surface should be cleaned using pressurized water if possible; oil, grease, fuel, and paraffin residues must be removed, and the surface must be completely cleared of form release agents, cement residues, wood chips, loose particles, and cured membranes.

### APPLICATION

After mixing equal amounts of the two components using a low speed mixer (300 rpm), apply immediately with a trowel. The pot life of the mixture is 25–30 minutes at 20°C.

### CONSUMPTION

Total consumption varies depending on the depth and width of the joints to be treated.

### TOOLS CLEANING

Clean the tools and equipment first with a paper towel, then wipe them with solvent. The rollers cannot be reused.

## PACKAGING

30 kg Set (Component A: 20 kg, Component B: 10 kg)

## STORAGE AND SHELF LIFE

It should be stored in a dry, moisture free environment away from direct sunlight, at temperatures between +5°C and +25°C. The shelf life is 12 months from the date of manufacture, provided the packaging remains undamaged and unopened. Packaging must be protected from frost and heat. Pallets should not be stacked on top of each other during transport and storage.

## STANDARD

EN 1504-2:2004 CE Certificate

## FEATURES

| FEATURE | RESULT | TEST METHOD |
|---|---|---|
| Percentage elongation at 23°C | >1200 % | ASTM D 412 / DIN 52455 |
| Tensile strength at 23°C | >2 N/mm2 | ASTM D 412 / DIN 52455 |
| Resistance to water pressure | No leakage (1 m water column, 24 hours) | DIN EN 1928 |
| Adhesion to Concrete | >2,0 N/mm2 | ASTM D 903 |
| Hardness (Shore A) | 35-40 | ASTM D 2240(15") |
| Hydrolysis (5% KOH, 7 days) | No elastomeric change was observed. | laboratory On-site (at factory) |
| Serving temperature | -30 °C 'dan +90 °C | laboratory On-site (at factory) |
| Maximum temperature (shock temperature) | 150 °C | laboratory On-site (at factory) |
| Use life | 30-35 min. | Conditions: 20°C, 50% RH |
| Curing Time | 1-3 hours | laboratory On-site (at factory) |
| Light pedestrian traffic duration | 12-24 hours | laboratory On-site (at factory) |
| Definitive date for transition to full operation | 7 days | laboratory On-site (at factory) |
| Chemical properties | High resistance to acidic and alkaline solutions (5%), detergents, seawater, and oils | laboratory On-site (at factory) |

## WARNINGS AND RECOMMENDATIONS

Only the product's own liquid should be used when preparing the mixture; absolutely no foreign substances should be added. Furthermore, methane gas seeping from the soil may have accumulated inside the tanks. Precautions must be taken with this possibility always in mind.

## SAFETY WARNINGS

Ensure adequate ventilation and implement health precautions when using in enclosed spaces. Do not leave the container lid open. Do not expose to direct sunlight or heat. Keep out of reach of children. Always use appropriate safety equipment such as masks, gloves, and goggles. Protect your eyes and face. Avoid contact with eyes and skin. In case of eye contact, rinse immediately with plenty of water and consult a specialist. Refer to the Material Safety Data Sheet for detailed safety information.

## LEGAL DISCLAIMER

İZOFALT Insulation Construction Textile Ind. And Trade Ltd. Co. İs not responsible for application errors that may occur if the product is used for purposes other than intended or if the above conditions are not complied with.



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