

# PENTENS E-601AS

Anti-Static, Solvent Free, Self-Leveling Epoxy Top Coat

## Product Data Sheet

### Description

PENTENS E-601AS is a self-leveling, anti-static, solvent-free epoxy floor coating. The cured floor exhibits excellent antistatic properties and finishes to a smooth, seamless surface with an attractive appearance that can be easily maintained in a hygienic condition.

### Uses

PENTENS E-601AS is ideal for use in areas where electronic components could cause an explosion through static electricity or stray currents generated by friction.

PENTENS E-601AS is recommended for floors in:

- Electronic industries
- Wafer and PC component production
- Synthetic fiber mills
- Processing and handling of combustible goods
- Operating theatre and recovery rooms

### Advantages

- Anti-static.
- Good chemical resistance.
- Easy to apply.
- Seamless.
- Easy to maintain.



### Technical & Physical Data

|                   |                                    |
|-------------------|------------------------------------|
| Form              | Liquid                             |
| Specific Gravity  | 1.2±0.05 kg/l                      |
| Pot Life @ 25°C   | 40 minutes                         |
| Storage Condition | Store in a dry, cool place         |
| Shelf Life        | 1 year when unopened and undamaged |

|                |            |
|----------------|------------|
| Packaging      |            |
| ■ Component A: | 20kg /pail |
| ■ Component B: | 5kg /pail  |

#### 7 days cured @ 20°C

|                         |                                                  |
|-------------------------|--------------------------------------------------|
| Compressive Strength    | 8000psi                                          |
| Flexural Strength       | 6000psi                                          |
| Bond Strength           | 25kg /cm <sup>2</sup>                            |
| Abrasion Resistance     | <0.1 g                                           |
| Hardness (Shore D)      | 82                                               |
| Resistivity             | >1 x 10 <sup>4</sup> Ω to <1 x 10 <sup>6</sup> Ω |
| Application Temperature | 10°C to 35°C                                     |
| Service Temperature     | -10°C to 60°C                                    |

### Consumption

| System                               | Product              | kg/m <sup>2</sup> | mm         |
|--------------------------------------|----------------------|-------------------|------------|
| Primer                               | E-008 or             | 0.2 – 0.3         | 0.2 – 0.3  |
|                                      | E-620TR              | 0.2 – 0.3         | 0.1 – 0.2  |
| Screed<br>(Optional for<br>Leveling) | E-502+Silica<br>Sand | 1.0 – 2.0         | 0.8 – 1.6  |
| Copper Grounding Strips              |                      |                   |            |
| Conductive<br>Base Coat              | E-502AS              | 0.13 – 0.2        | 0.1 – 0.15 |
| Conductive<br>Top Coat               | E-601AS or           | 0.6 – 1.5         | 0.4 – 1.2  |
|                                      | E-603AS or           | 0.3 – 0.5         | 0.2 – 0.4  |
|                                      | E-620AS              | 0.3 – 0.5         | 0.2 – 0.4  |

## Instruction for Use

### Surface Preparation

It is essential that PENTENS Anti-Static Epoxy Flooring System is applied to sound, clean and dry substrates in order to achieve maximum adhesion between the floor coating and substrate.

The substrates in contact with the ground must have a vapor barrier installed, or applied with PENTENS T-303 Cementitious Damp-proofing Leveling Mortar before priming. The moisture content of the substrate shall not be higher than 4% throughout.

### Primer

Mix component A and component B of epoxy primer (PENTENS E-008 or E-620TR) with a low speed electric or pneumatic power stirrer until a homogeneous substance is achieved. Immediately pour the material onto the substrate after mixing, and spread the mixture using a squeegee or paint roller. For very porous substrates, a second primer coat may be required.

### Epoxy Screed (Optional)

Distribute the mixture of PENTENS E-502 and silica sand or selected aggregates onto the cured primer as a layer of mortar screed and trowel the mortar screed to the required thickness. After the epoxy screed has cured, high spots or trowel marks should be rubbed away and dust and other debris removed by vacuum cleaning.

### Copper Grounding Strips

When the primer/screed has cured, self-adhesive copper strips of 10 - 20 mm in width and 50m in length are bonded to the primed/screed surface. It is prudent to place strips at every 1m distance longitudinal and parallel to the floor. The strips are grounded near a column in the mid-section of the floor.

However, you may consult with the project owner or the consultant on possible special grounding requirements.

### Conductive Base Coat

PENTENS E-502AS A/B must be mixed homogeneously prior to application, using an electrical stirrer at approximately 300 – 400 rpm. Mixing time is minimum 3-4 minutes but depending on the circumstances, it may take longer until a homogeneous mix is achieved.

The mixed PENTENS E-502AS should be applied to the prepared surface by using trowel. Wait 12 to 24 hours for cure.

For optimum performance, it is recommended to slightly grind the surface of the body coat.

### Conductive Top Coat

PENTENS E-601AS must be mixed homogeneously by using an electrical stirrer at approximately 300-400 rpm. Mixing time is minimum 3-4 minutes but depending on the circumstances, it may take longer until a homogeneous mix is achieved.

Pouring out the whole mixture at once, distribute and level the material with squeegee scraper trowel or spike roller. Wait 24 hours to achieve initial hardness and 7 days for full cure.

### Cleaning

PENTENS E-601AS should be removed from tools and equipment with thinner immediately after use. Hardened material can only be removed mechanically.

### Safety

Ensure adequate ventilation when using these product and avoid inhaling the vapor. Wear suitable protective clothing, gloves and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provides additional skin protection. In case of contact with skin, rinse with plenty of clean water, followed by soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical treatment. If swallowed, seek medical treatment immediately- do not induce vomiting.

PENTENS E-603AS is flammable. Keep away from sources of ignition. No smoking in the event of fire, extinguish with CO<sub>2</sub> or foam. Do not use a water jet.