

## TECHNICAL DATA: APU 40 QUIET

### APU 40 2 Component Vibration Absorbent Polyurethane Intermediate Coating

#### Mix Ratio

By Weight 3 Part A : 1 Part B

#### Application Conditions and Temperature:

Minimum 10 °C air and substrate temperature up to a maximum of 30 °C. Humidity must not exceed 75%.

#### Working Time:

Temperature	10 °C	20 °C	30 °C
Time	40 minutes	25 minutes	15 minutes

#### Cure Schedule:

Temperature	10 °C	20 °C	30 °C
Light Foot Traffic	24 – 36 hrs	18 – 24 hrs	12 – 18 hrs
Tack free:	12 hours @ 20 °C		
Mechanical Load:	2 – 3 days @ 20 °C		
Full Chemical Resistance:	7 days @ 20 °C		

#### Re Coat window:

18-24 hours but within 48 hours @ 20 °C

**1 kg Yield at prescribed Film Thickness of 3 to 5mm is 0.33 to 0.2 m<sup>2</sup>**

**Layer Thickness:** Standard 3.5mm

**Package Size:** Available in 10kg and 24kg units

**Shelf Life:** 12 months in unopened containers. **Must be protected from freezing.**

**Storage:** Store product at normal room temperature, 20 °C before using. Storage should be between 10 °C and 20 °C. Any part used kits should be completely re sealed with tape and used as soon as possible.

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## Product Description:

- APU 40 is a high quality, 2 component, Polyurethane underlayment designed to absorb vibration and reduce noise. Specifically designed for use with APU 45 to achieve a comfortable floor with noise reduction qualities.
- Once combined the system will result in a seamless coating of between 5mm and 7mm. This coating is designed to offer ease of cleaning and maintenance with a cushioned surface and sound deadening qualities both in the room where the system is laid and adjacent rooms.
- This high-quality coating combination is suitable for domestic and commercially used areas where the environment places a high demand on the floor, e.g. living rooms and business areas, doctor's offices, nurseries, homes for the elderly, rehabilitation facilities, fitness and spa areas and many more.
- Sealing with APU 46 results in an even, matt surface. The reflective properties of glossy coatings are reduced by light dispersion on the surface. This means that the product is ideal for visually demanding areas as it reduces glare and obvious marking.
- APU 46 cures by physical drying and chemical cross-linking to a consistent strong film. The resultant surface is a hard, abrasion resistant, photo-stable film with a stain resistant surface. The finished surface is easy to clean and maintain.
- APU 46 is extremely resistant to water based solutions, diluted acids and alkalis as well as engine and fuel oil. The product is very resistant to staining from household chemicals, strongly dyeing foodstuffs and drinks like beer, red wine or coke.

## Product features

- Solvent free
- Environmentally friendly
- Self-Levelling
- Reduces subsonic noise
- Walking noise reduction
- Increased walking comfort
- Long working life
- Low emission coating

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**Areas of Use:**

- As flexible interlayer for high-quality polyurethane coatings.
- Suitable for many applications including, offices, hotels, schools, universities, gyms and nurseries.
- Suitable for health care facilities including hospitals, doctors surgeries, homes for the elderly, rehabilitation centres etc.
- Decreases ambient and subsonic noise and increases walking comfort for floors in commercial and domestic settings.
- Low-emission for coatings in gyms, spas and food preparation areas
- Any area where the user is subject to long periods of standing i.e. hairdressers, nurses and teachers.

**Surface Preparation:**

Prior to application we recommend that the substrate is mechanically prepared to ensure that all dirt, oil, dust, foreign contaminants, laitance and any previous poorly adhered coatings are removed to ensure a trouble free bond to the substrate. The substrate to be coated has to be levelled, dry and free of dust and must have adequate tensile and compressive strength.

**Build up coat options:****Dry surface, no vapour pressure present or anticipated.**

1. Prime the prepared substrate with EP 70 All Purpose Primer at recommended coverage rate (refer to EP 70 TDS).
2. Optional Scratch coat with EP 70 mixed with fine sieved dry sand (refer to EP 70 TDS).
3. Apply coat of APU 40 at recommended coverage rate.
4. Apply coat of APU 45 at recommended coverage rate
5. Apply top sealing coat of APU 46 at recommended coverage rate.

**Damp surface and or vapour pressure present.**

1. Prime the prepared substrate with EP 72 Vapour Barrier at recommended coverage rate (refer to EP 72 TDS).
2. Prime again with EP 72 Vapour Barrier. Both coats together must achieve a minimum of 900 g/m<sup>2</sup> (refer to EP 72 TDS).

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**These first two stages should be considered as a separate process to address the moisture in the slab.**

1. Prime again with EP 72 Vapour Barrier and lightly scatter the surface with fine dry sand.
2. Apply coat of APU 40 at recommended coverage rate.
3. Apply coat of APU 45 at recommended coverage rate
4. Apply top sealing coat of APU 46 at recommended coverage rate.

### Mixing

APU 40 is a two component product. Decant Part B, the hardener into part A then thoroughly mix for a minimum of two minutes using a low speed drill and mixing paddle, to ensure uniform consistency. Avoid air entraining the product. Always ensure thorough mixing as improper mixing may result in product failure. We recommend that the mixed product is decanted into a clean container and mixed briefly to avoid the chance of un-mixed product on container walls effecting curing. If part of a kit is to be used both parts should be premixed before measuring out the required weight of product,


### Application

- Immediately after mixing pour the product onto the prepared slab at the approximate weight per area of floor. Then with a notched trowel or squeegee pull out an even layer on to the prepared surface.
- The product is optimized for self levelling and air release. The product should still be spike rolled. This should take place 10 to 15 minutes after placement.
- Always maintain a wet edge.
- When applying subsequent coatings do not use sharp spiked shoes. Shoe in Pro with blunt studs should be worn to avoid damaging this layer.
- Maintain temperatures and humidity within the recommended ranges during the application and during the curing process. **Before application the product must be at the same temperature as the room in which it will be applied. The floor temperature must not be any more than 3° C lower than the room temperature unless this will be at dew point.** If a dew point situation occurs the product may foam and lead to possible failure or compromised product characteristics. The surface must be dry before the application of this product. Coating damp surfaces or sweating into the product may lead to foaming.
- Do not apply this product to heated surfaces as this will reduce application time and may lead to blisters. **Fresh polyurethane coatings are susceptible to humidity, keep within the recommended guidelines.**
- Restrict foot traffic until the next coat is applied.

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### PRODUCT PERFORMANCE DATA

<b>Shore A / D Hardness</b>	<b>68 / 20</b>
<b>Viscosity:</b>	<b>Mixed Parts 4000 mpas</b>
<b>Solids Content</b>	<b>100%</b>
<b>Density:</b>	<b>0.99 kg per/ litre</b>
<b>Elongation at break</b>	<b>50%</b>

	
<b>Achtis Group</b> <b>1 Peryton Park, Peryton Way, Europarc</b> <b>Grimsby, N E Lincolnshire DN37 9TL UK</b>	
<b>13</b>	
PU40	
<b>DIN EN 13813:2003-01</b>	
Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR19	
Flammability	C <sub>fl</sub> -s1
Emission of corrosive Substances	SR
Wear resistance to BCA	AR 0.5
Adhesive tensile strength	B 1.5
Impact resistance	IR 19

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