

# Application Instructions

## Duturo

Duturo has been improved in many ways both in the performance of the final finish and the versatility during application. It is important, particularly with applicators of the old Duturo, that the new procedures are followed.

Application is best achieved by using teams of applicators, some rolling and others blading down.

Duturo is a finish, which should be tackled by skilled teams only. If Duturo is being used for the first time, areas no bigger than 10 m<sup>2</sup>, with a single wet edge no bigger than 2.5 m should be attempted. On all projects a site mock up should always be carried out first, and approved, prior to any works starting. If any areas are larger than 10 m<sup>2</sup> please contact Armourcoat to discuss viable options. These would include Armourcoat tendering for the work directly or possibly offering training on the application of Duturo.

### Important Note on Drying

Drying times of all products are very dependent upon conditions. Humidity, air circulation and temperature all play a different part. The most effective and easy way to accelerate drying is to create good air circulation using large fans. If there is little ventilation or the humidity level is very high, a de-humidifier will also help. Warmth helps to accelerate drying but a good flow of dry air is the most important factor. Duturo should only be applied in temperatures between 10°C and 25°C.

## 1 Preparation

### 1.1 Substrates

Substrates must be sound and true and any holes should be filled to a standard suitable for a paint finish. Apply masking tape to perimeters.

#### 1.1.1 Drywall

DO NOT use ready mixed drywall jointing compounds as these soften when wetted and cause problems when removing masking tape. Use setting jointing compound supplied in powder form instead. Prepare walls by fixing beads and taping and jointing boards. Prime as detailed in section 1.2.

#### 1.1.2 Wood, MDF or other composite wood sheets

Prior to application of Duturo, ensure that materials are totally dry and then apply 2 coats of oil-based primer. Wood based substrates readily absorb water and swell. They then crack at the joints when drying out, often

months later. Using an oil-based primer prevents any water from the Duturo products entering the substrate and minimises the problem.

### 1.1.3 Existing Walls

Look out for:

- Loose materials - remove and fill dips flush.
- Materials that will swell with moisture such as bare paper - remove back to a sound substrate.
- Shiny hard surfaces that are difficult to bond to: abrade with coarse abrasive paper.
- Stains that may dissolve into the Duturo and gradually come to the surface e.g. felt pen, damp etc. - seal with stain blocking sealer such as oil based paint.

### 1.1.4 Plastered or Rendered Walls

- Ensure walls are prepared to an industry-accepted standard. Allow plaster/render to dry/cure fully before applying any coatings. Prime surface using suitable primer as outlined in section 1.2.

## 1.2 Priming

Prime the substrate using either Armourcoat K40 Primer (for non porous substrates) or R13 resin diluted 1 part resin to 5 parts water (for porous substrates). Very porous substrate may require 2 coats of primer. This will even up the absorbency of the substrate and in the case of K40 provide an excellent finely textured mechanical key. Allow the primer to dry fully; in very good drying conditions this will take 2 hours minimum - overnight drying is preferred.

### 1.2.1 Primer Coverage Rates

K40 Primer: 8 – 12m<sup>2</sup>/kg/coat  
Pack size: 12kg  
Total coverage : 96 – 144m<sup>2</sup>

R13 Resin diluted: 8 – 12m<sup>2</sup>/litre/coat  
Pack size: 5 litre  
Total coverage: 240 – 360m<sup>2</sup>/5litre neat resin

## 1.3 Lighting

Try to ensure that the final lighting for the room is in operation. If this is not possible, place spotlights close to the wall shining across **and not directly** at the wall (this can be a fire hazard). This lighting will show clearly how evenly the Duturo is being applied.

## 2 Duturo Application

Duturo can be applied as a one-coat system, however for the best results a two-coat application is recommended. The first coat should be trowel applied to grain thickness and then left overnight to dry, before the second coat is applied as described below. For a two coat application allow for a further 0.7 kg/m<sup>2</sup> of Duturo.

- 2.1 Duturo is applied directly from the pail using a short pile 9" roller – no need for a roller tray. Work the roller into the pail of Duturo until it is thoroughly wetted out.
- 2.2 Lift the heavily charged roller out of the pail and place it near the top of the wall. Applying moderate even pressure, pull the roller down the wall, starting at the top and pulling the roller down the wall will minimise spillage. When the roller feels empty – after approximately a 1.2 m (4') long strip, return the emptied roller to the top of the wall and pull the Duturo down again once or twice to even up the thickness. New Duturo will even out quite readily and has very low splatter.
- 2.3 Apply Duturo to approximately 2.5 square metres (25 sq feet) = floor to ceiling x 1 metre (3') wide. Having covered this area, now run the emptied roller over the wall horizontally and then again vertically to get the coating nice and even – areas with a fine stipple are too thin; areas with deep 'ribbons' are too thick.  
  
Having evened up the wall, immediately run the roller lightly over the surface to create a crude stipple. The application of this metre wide section (including evening up and stippling) should take around 5 minutes.
- 2.4 Apply the next metre wide section beside the first. When lightly rolling across wall to stipple the new section, continue rolling into the old, always travelling from new to old so as to avoid marking the wall where the roller first touches. This blends the sections together and as the old section is rolled over for the second time, it achieves a finer and more even stipple.
- 2.5 The area covered on each of the sections described in section 6 and 7 depends very much on the speed of the applicator and the drying conditions – faster drying conditions and/or slower applicators = cover smaller sections at a time. If you are too ambitious and try to do big sections at a time, the previous section may have dried too much to achieve the fine second stippling and will not blend in well with the new section.

## 3 Blading Down

The amount of texture and final appearance of the finish is largely controlled by the person blading the surface. Good consistent Duturo roller application will make this a lot easier. The person blading needs a Duturo blade and a wet cloth to clean and wet the blade with.

As the Duturo dries, it starts to skin. Wetting the blade allows the blade to glide over the skin and flatten it but in doing so, the Duturo skin will soften and become tacky again. The Duturo then needs to be left to dry a little longer before blading again to a smoother finish.

The person blading will be moving along the wall in a series of overlapping stages to take the Duturo to a final finish. The people roller applying and blading need to be well co-ordinated and this will come with experience. Having said this, Duturo has excellent pliable qualities, which mean that late blading can usually be overcome by applying more pressure to the blade. This pliable nature also allows even fairly major damage such as from collision of steps with soft material, to be bladed away invisibly.

The times stated depend upon drying conditions.

### 3.1 Fine Textured Brushed Finish (Brushed)

This finish may require a slightly higher application rate (1.25 kg/m<sup>2</sup>).

- 3.1.1 Apply Duturo using a roller (2.1-2.3) or trowel to achieve a uniform coating thickness.
- 3.1.2 Once a suitable area (depending on drying rates) is applied lightly brush over the surface using a coarse bristle brush. For best results the Duturo should still be fairly wet when this step is carried out.
- 3.1.3 Allow the brushed areas to dry for 20-40 minutes before gently blading the surface in the direction of the brush marks (care should be taken not to blade to early and with too much applied pressure)
- 3.1.4 The finish can at this point be left or bladed even further until the desired level of smoothness and brush marks are achieved.

### 3.2 Evenly Textured Finish (Savannah)

- 3.2.1 After final stippling, leave the Duturo for 20 - 40 minutes before blading down from all different directions to initially close down the stipple.
- 3.2.2 Return at approximately 5-10 minute intervals, blading down with a clean wet blade until the desired finish is achieved.

### 3.3 Mainly Smooth Finish With Relatively Few Pits (River Stone)

This finish may require a slightly higher application rate (1.25 kg/m<sup>2</sup>).

- 3.3.1 Within a few minutes of the Duturo being finally stippled, run the Duturo blade horizontally across the surface to take the tops off the stipple and crudely flatten it. This works best when the blade is almost perpendicular to the wall. Even at this stage, the Duturo will have quite a lot of body and it should feel as though the Duturo is being delicately scraped. Keep the blade clean to stop it dragging the surface too much.
- 3.3.2 Leave the Duturo to dry until it is no longer tacky to the touch but still pliable and then gently stroke the blade in a quick sweeping motion over the surface from all different directions to flatten it further. Keep the blade clean and don't worry about light 'claw' marks being formed by the material dragging; these will be eliminated when the Duturo has dried further and is bladed again.
- 3.3.3 Return at approximately 5-10 minute intervals, blading down with a clean blade until the desired finish is achieved.

### 3.4 Evenly Textured Directional Finish (Strata)

Follow steps 3.2.1 and 3.2.2 but blade down just horizontally at first. Finishing blading should be done in all directions.

## 4 Applying Duturo Colourwash

**This is best done by a 2-person team, 1 rolling and one blotting the excess off with a cloth.**

- 4.1 Allow Duturo to dry for at least 24 hours in good conditions. If it is not firm to the touch, leave it longer.
- 4.2 Apply the Colourwash using a short pile roller. Starting at one end of the wall, have one person applying and the second person tamping off. Work fast, getting the whole wall covered but not trying to get a totally even coat as though you were painting.
- 4.3 The second person should, within a few minutes of the colourwash being applied, tamp the wall with a lint free cloth to blot off the excess colourwash and leave a mottled surface.
- 4.4 Spillages, drips or runs must be dealt with fast as the colourwash dries quickly. Use a damp cloth if necessary but this may leave a light patch on the finished work, which will need to be blended carefully.
- 4.5 A number of different effects can be created for the Duturo range by varying the application and tamping tools used. For these different effects a site mock up is highly recommended.

## 4 Applying Armourcoat Clearseal (Necessary for protection of externally applied Duturo)

Allow Duturo to dry for at least 24 hours in good drying conditions. If it is not firm to the touch, leave it longer. If a Duturo Colourwash has been applied, leave it for 4 hours until fully dry.

Using a short pile roller, roll on evenly across the wall. Work methodically so that no areas are missed and check carefully that there are no drips or 'tram lines' left which may stay visible on the final finish. Roll on in one direction and then roll across at 90° to create an even coating. For the best results apply 2 coats of Clearseal. Apply the first coat (diluted with 10% water) and allow to dry. Apply a second neat coat to achieve a uniform finish.

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