

## Low Temp Applications: Using Product Accelerators

*Before working with Res-Tec Accelerators it is vital to read and understand these safety instructions and the associated Material Safety Data Sheet. Most importantly the accelerator must be thoroughly mixed into the resin before Powder Hardener is added. Accelerator and Powder Hardener / Catalyst must never be allowed to come directly into contact with each other.*

### Introduction


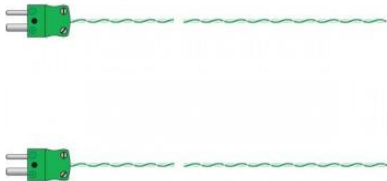

The accelerator is used to speed up the curing of the Res-Tec Roofing liquid systems to allow normal working times in cold conditions and to allow their use at deck temperatures as low as 1°C. Accelerator is used in addition to the normal powder hardener / catalyst – not as a replacement. Without accelerator the materials should not be used below 5°C or where the temperature may fall below 5°C before the resin is cured.

### Temperature

A measure of air temperature is not sufficient. It is important that anyone using accelerators ensures that accurate temperature readings of both the surface onto which the product will be applied and also of the resin itself are taken. To use this product you must have accurate measuring equipment including a Thermal Differential Thermometer, 2x Wire Probes (for measuring surface / air temperature) and 1x penetration probe (for measuring resin temperature)

**Surface Temperature** - Surfaces should be between 1°C and 10°C. It may be possible to use accelerators above 10°C but this may severely reduce working time. To measure this you will require a good quality thermometer capable of reading surface temperature of the deck (this is critical as this could be several degrees different to air temperature).

**Resin Temperature** - The resin in which you will be adding accelerator should not be overly warm. To measure this you will require a good quality probe thermometer. Ideally if possible the resin should be kept between 5°C and 10°C prior to use. This may not always be possible but you should try and avoid storing at room temperature prior to adding accelerator. If the resin/primer is warm and you add accelerator you will have too short working time and may lose product. If the resin is too cold it will be too viscous (too thick) and be difficult to use. It will also take a very long time for powder hardener to dissolve.

1 x Thermal Differential Thermometer	2 x Wire Probes (for measuring Surface / Air Temperature)	1 x Penetration Probe (for measuring Resin Temperature)
		

## Accelerator Packs

The pack weight of the accelerators has been adjusted to provide the optimum cure time depending on the product used. The pack size and weights are as follows:

Accelerator	Package	Weight	Addition Rate
Flexitec 2020 Resin Accelerator	500ml Tin	300g	1 pack per 10kg of Flexitec 2020 Resin
Flexitec 2020 Primer Accelerator	500ml Tin	400g	1 pack per 5kg of Flexitec 2020 Primer
GRP Roof 1010 Base Coat Accelerator	500ml Tin	300g	1 pack per 10kg of GRP Roof 1010 Base Coat Resin
GRP Roof 1010 Top Coat Accelerator	250ml Tin	150g	1 pack per 10kg of GRP Roof 1010 Top Coat Resin

## Method

Add the whole Accelerator pack to the opened and stirred product in its original container at the following rates.

Product	Number of Accelerator Packs Required
10kg Flexitec 2020 Resin	1x Flexitec 2020 Resin Accelerator Pack
20kg Flexitec 2020 Resin	2x Flexitec 2020 Resin Accelerator Packs
5kg Flexitec 2020 Primer	1x Flexitec 2020 Primer Accelerator Pack
10kg GRP Roof 1010 Base Coat Resin	1x GRP Roof 1010 Base Coat Accelerator Pack
20kg GRP Roof 1010 Base Coat Resin	2x GRP Roof 1010 Base Coat Accelerator Packs
10kg GRP Roof 1010 Top Coat Resin	1x GRP Roof 1010 Top Coat Accelerator Pack
20kg GRP Roof 1010 Top Coat Resin	2x GRP Roof 1010 Top Coat Accelerator Packs

The effect is to give a typical working time of approximately 25-35 mins at 5°C, using the maximum powder hardener levels (4%).

**IMPORTANT:** Accelerators are not designed as a replacement for the powder hardener or catalyst. After the Accelerator has been thoroughly stirred into the main products, add the powder hardener to Flexitec 2020 or liquid catalyst to GRP Roof 1010 as described in the separate manuals.

### Note on Colour

There may be a minor colour difference evident when accelerator is added. For this reason, accelerated and un-accelerated product should not be used side by side on the same job if such colour difference is likely to be undesirable for the client.

### Important Safety Notes:

- The accelerators must only be used with their corresponding resins and not with any other product
- The accelerator must be mixed completely into the resin before adding Powder Hardener or Catalyst
- Store the accelerator well away from powder hardener / catalyst and other organic peroxides
- Never allow the accelerator to come into direct contact with powder hardener / catalyst or other organic peroxides
- Read and familiarise with the MSDS for each part of the system.