FAST CURE EPOXY

All published data sheets for Virtus products quote cure characteristics for the respective standard cure systems. As a general rule, these provide hard cure (light traffic) times between 10 and 16 hours at 20°C with usable life times of 40-60 mins, these being acceptable for most situations. Time limitations may necessitate a faster initial cure time (working between shifts or close down periods) in which instances the use of a Fast Cure hardener can be employed within most of the standard Virtus floor product range. On average, this has the effect of reducing the hard cure time by 1/3 but also reducing the usable life by 1/2:

EXAMPLE
Strongcoat Standard
Hard cure time at 20°C  16 hrs
Usable life at 20°C     30-40 mins

Strongcoat Fast Cure
Hard cure time at 20°C  11 hrs
Usable life at 20°C     20 mins

Physical and chemical resistant properties are little affected by this substitution. It should be noted that despite the accelerating effect of this hardener over hard cure time, the resistance time of the product to chemical contact will still only be achieved after normal 5 day cure period.

The hardener adopted for the fast cure epoxy system has been designed to reduce hard cure time at “normal” application temperatures (15-20°C). This product should not be specified as a means to providing an epoxy system capable of curing in temperatures below 10°C as this will lead to extended cure times with the possibility of carbonate salt formation if the ambient humidity is high.

LOW TEMPERATURE CURE EPOXY (LTC)

Similar to Fast Cure grade but faster cure response with a further reduction in usable life which has a limiting effect over the volume which can be practically mixed and used at any one time. Resultantly smaller pack sizes are available in this grade.

Again, cured physical and chemical properties are little affected over those for the standard cure product. Typical reductions in hard cure times are approximately 60% over that of the standard product but full cure and resistance to chemical attack will be in the order of 3-5 days compared to 5-7 for the standard cure systems:

EXAMPLE
Strongcoat Standard
Hard cure time @ 20°C  16 hrs
Usable life @ 20°C     30-40 mins

Strongcoat LTC
Hard cure time @ 20°C  6 hrs
Usable life @ 20°C     15 mins

Rapid grades may be applied at temperatures ranging from 25°C-5°C. Cure times below 10°C will become extended but still show significant advantage over Standard or Fast Cure grades.