



## Technical Data Sheet / *americancrete* HF

### Description

*americancrete* HF is a heavy duty polyurethane-based floor which provides excellent resistance to abrasion, chemical attack and other physical aggression. It is trowel applied to produce a heavy duty, matt, anti-skid surface which is impervious to almost everything, including substantial impact, abrasion and steel wheeled traffic.

*americancrete* HF offers the highest level of durability available with a life span of ten or more years in the toughest of environments. They are generally laid at between 1/4 inch and 3/8 inch. *americancrete* HF is totally non-porous, has excellent chemical resistance and its surface profile confers slip resistance even in wet process areas. Cleaning is straightforward and because they are impervious, all types of cleaning methods and materials may be used.

### Composition

A water dispersed polyurethane resin system combined with graded silica sand and aggregates.

### Appearance

A profiled aggregate surface with chosen solid colour provides a slip resistant texture.

### Durability

Highest order of durability, resistances to abrasion impact and chemical attack. Extremely strong and in most cases has physical properties which are approximately double that of concrete. Will tolerate a wide range of organic and inorganic acids, alkalis and salts. It has extremely high bond strength and is stable to steam cleaning.

### Thickness

Typical 1/4 inch

### Typical Applications

Typical applications are in industries such as food, pharmaceutical, chemical and other manufacturing sectors where spillages of corrosive or organic liquids occur, coupled with the requirement for frequent and thorough high temperature washing. Food processing plants, abattoirs, sausage factories, bakeries, dairies, breweries and kitchen are prime users. Even in these extreme conditions, a life span of ten years or longer can be expected.

### Physical Properties

Compressive Strength	7,500 psi
Tensile Strength	850 psi
Flexural Strength	1,800 psi
Elastic Modulus	1.7 x 10 <sup>5</sup> psi
Density	130 lbs. / sq. ft.
Softening Point	260°F / 126°C

### Substrates

Concrete, polymer reinforced screeds, grano concrete, steel

### Substrate Preparations

The success of our flooring system is dependent upon the proper preparation of the substrate. Although various methods are acceptable, captive shot blasting (blastrac) is the preferred method of substrate preparation by abrading the concrete and removing latent materials that impede adhesion.

### Cleaning and Maintenance

Regular cleaning is recommended in order to maintain slip resistant, enhance appearance and reduce any tendency to retain dirt. Normal proprietary cleaning agents in combination with pressure washing/steam cleaning may be employed.

### Cure Schedule

Usable Life of full unit/mix at 20°	15 minutes
Initial film gel time (joining up) at 20° C	
3/8 inch build	20 minutes
Cure time to light traffic at 20° C/3/8 inch	4 to 6 hours
Cure time to light wheeled traffic at 20° C	
3/8 inch	12 to 16 hrs.
Cure time to heavy duty traffic at 20° C	
3/8 inch	24 hours
Full cure at 20° C/3/8 inch	3 to 5 days

### Chemical Resistance

Excellent resistances to organic and inorganic acids, alkalis, fuel and hydrolic oils, aromatic and aliphatic solvents.

### Colours Available

Available in *americancrete* standard colours – Red, Grey, Blue and Buff. Custom colours are available; see RAL# standard colours. Vertical trowel grades are available in matching colours. Colour uniformity cannot be completely guaranteed from batch to batch.

### Health and Safety

See MSDS sheets.

Website: [www.americancrete.com](http://www.americancrete.com)