

# Penacrete HES

High early strength gain cementitious  
non shrink grout

## DESCRIPTION

Penacrete HES is a high early strength, flowable grout for use where rapid strength gain is required.

## ADVANTAGES

- Flowable
- High early strength
- Easy application
- Shrinkage compensation
- Chloride free

## Typical Properties

### SET TIMES @ 20°C

INITIAL	25 minutes
FINAL	40 minutes

### COMPRESSIVE STRENGTH

1 hour	15 MPa
2 hours	25 MPa
4 hours	33 MPa
24 hours	50 MPa
28 days	57 MPa

## APPLICATION INSTRUCTIONS

### Preparation

All contacted surfaces must be free of oil, grease or other contamination which may inhibit bond. Any cracked or weakened concrete should be removed prior to being repaired to provide a solid foundation. Scabbling or water blasting should be used to remove laitance and provide a mechanical key.

### Priming

The substrate should be presoaked with clean water prior to carrying out the repair.

This operation can be used to check that the formwork is liquid tight. After soaking, all water should be drained from the form work just prior to commencing the placement of the Penacrete HES. Free water on the surface will reduce the bond and ultimate strength.

### Mixing

Penacrete HES is suitable for mixing using a drill and suitable paddle, or pump where a large quantity is required. Use 2.7 - 2.9 litres of water per bag of Penacrete HES to achieve a smooth fluid consistency. Mix for 3 to 5 minutes to ensure thorough mixing. Excess water will reduce the final strength and delay the setting times. Always add the powder to the water while mixing slowly to avoid lumps. Only mix that quantity of material that can be used within the setting time. Do not attempt to rework or retemper any partially set product.

### Application

Place the mixed Penacrete HES in the formwork by pouring or pumping in a single continuous operation to fill the void. If a break is inevitable, it should not exceed 5 minutes before pumping is recommenced. The provision of air bleed holes will help facilitate placement under complex base plates. The minimum thickness applied in any application should be limited to 15mm.

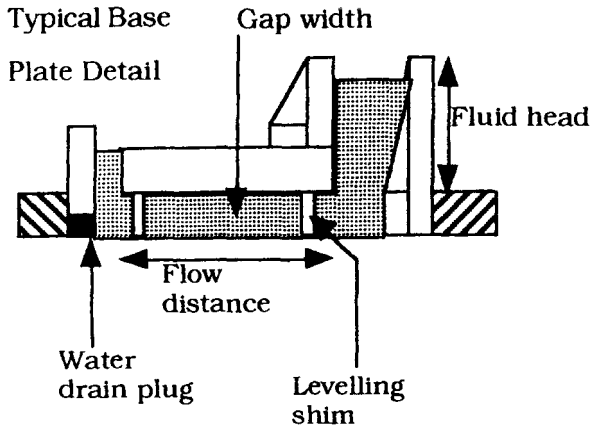
### Curing

Immediately after the formwork has been removed apply a coat of Curecon PW to the areas grouted.

## MARKETING SERVICES

THOMSON WHITE AUST P/L  
250 Princes Hwy Dandenong Vic 3175  
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**PENACRETE HES**



are made without guarantee as the conditions of use are beyond the control of the manufacturer.

**ALLIED PRODUCTS**

Aftek manufactures a broad range of construction products including.

- Grouts
- Coatings
- Admixtures
- Adhesives
- Sealants
- Floor Toppings
- Floor Levelling Compounds
- Concrete Repair

**CLEAN UP**

Clean all equipment with water immediately after use.

**ESTIMATING**

**Packaging**

Penacrete HES is supplied in 25 kg bags.

**Estimating Data**

Consistency:	Flowable
Water required:	2.7 - 2.9 litres
Fresh wet density	2220 kg/m <sup>3</sup>
Yield per bag:	12.5 litres
No. Bags to cast one m <sup>3</sup> :	80 x 25kg

**STORAGE**

Penacrete HES is a cement based product which must stored in a dry area off the ground.

**PRECAUTIONS**

Where temperatures less than 5°C or greater than 35°C are encountered, contact our Technical Staff for specific advice.

Penacrete HES is non toxic, but it is alkaline in nature. Any contact with eyes or skin should be washed off with clean water. Protective gloves and clothing should be worn.

**NOTE**

Material safety data sheets for these and all Aftek products are available on request. Read the MSDS and product label carefully before using.

All reasonable care is taken in the compilation of this data sheet. All recommendations regarding use