



# ARACONE<sup>®</sup> AT

Non-shrink, free flow, extra high strength grout

## Description

ARACONE AT is supplied as a ready-to-use dry powder, requiring only the addition of water to produce a free flowing non-shrink grout. The material is a blend of specially processed cement, pre graded fillers and additives which impart high early and final strengths due to very low water requirement Controlled expansion to retain the original volume filled even after setting free flow characteristics without any segregation and bleeding.

## Uses

- Heavy duty support beneath loadbearing units especially where high static and dynamic forces occur
- Effective grouting of base plates and bolt pockets of Turbo Generators, Diesel Generating sets, Crane and Transporter Rails Even with high wheel loadings, Heavy Reciprocating equipment
- Compressors, Pump sets, Pulverizing mills, Metal Shearing and Processing Machines, Steel Rolling Mill Beds, Cement, Textile, Granite and Paper Plant machinery.

## Advantages

- Continue to occupy the filled space without shrinkage
- Ensures high level of contact with load bearing areas
- Also helps complete filling without voids, Consistency and reliability
- No need for external aids like rodding, poking, chaining etc.
- Can be used under heavy duty machines and equipment with high operational and static loads
- Site batching and blending variations eliminated Iron free
- No chance of deterioration by uncontrolled rust expansion, corrosion and staining of grout
- Does not cause corrosion of machine parts, anchor bolts etc.

## Method of application

- Measure water precisely
- Mix powder and liquid in ratio of w/p= 0.16 mechanically
- Use mixed grout within 30 minutes
- Clean concrete and steel surfaces thoroughly before grouting
- Build a strong, carefully designed leak proof shuttering
- Start curing when grout reaches 'touch-hard' state –within 4 -6 hrs.
- Cure properly for at least 7 days

NON SHRINK GROUT

Redwop<sup>®</sup>



- Consistency of grout:

Consistency	W/P required per 25 Kg bag
Pourable	0.120
Flowable	0.160

**Notes:** Sufficient grout must be prepared before starting. The time taken to pour a batch must be regulated to the time to prepare the next one.

### Flow characteristic

- Data on 75 mm gap between base plate and RCC surface

Normal head	50 mm head	100 mm head
1200 mm	2400 mm	3000 mm

**Notes:** Non shrink grout ARACONE AT has to be poured one side of the base plate. It has to come out other side. If top surface of grout touches to other side base plate bottom surface then all side grout has to be poured minimum at the surface of base plate.

### Technical Information

Properties	Results
Appearance	Grey colored powder
Density	2200 to 2250 Kg/m <sup>3</sup>
pH Value	7 to 8
Compressive strength @W/P 0.16 (BS 1881: part 116 1983)	>40 N/mm <sup>2</sup> @ 1 days >70 N/mm <sup>2</sup> @ 7 days >80 N/mm <sup>2</sup> @ 28 days
Tensile Strength	>3.5N/mm <sup>2</sup> @ 28 days
Flexural Strength (BS 4551, 1998)	>10 N/mm <sup>2</sup> @ 28 days
Coefficient of thermal expansion	11 x 10 <sup>-6</sup> per degree Celsius
Time for expansion	Start: 20 minutes Finish: 120 minutes
Pullout bond strength (W/P - 0.18)	>20 N/mm <sup>2</sup> @ 7 days >35 N/mm <sup>2</sup> @ 28 days
Young's modulus (ASTM 469 - 94)	28 kN/mm <sup>2</sup>
Pressure to restrain plastic expansion	0.004 N/mm <sup>2</sup> approx.

## Limitations

- Low temperature working: When the air or contact surface temperatures are 10 °C or below on a falling thermometer, warm water (30 °C to 40 °C) is recommended to accelerate strength development.
- High temperature working: At ambient temperatures above 40°C, cool water (below 20 °C) should be used for mixing the grout prior to placement.

## Curing

- On completion of the grouting operation, exposed areas should be thoroughly cured. This should be done by the use of REDICURE WB curing membrane, continuous application of water and/or wet hessian.

## Packaging

- ARACONE AT is supplied in 25 kg bags

## Storage

- Minimum of 6 months shelf-life if kept under room temperature (i.e. 27°C).

### **REDWOP CHEMICALS PVT. LTD.**

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