



## TIMM-CRETE AIR

Aditivo aireante para hormigón según UNE EN 934.2

### Product Description

TIMM-CRETE AIR admixture is an aqueous solution of a complex mixture of organic acid salts.

TIMM-CRETE AIR is specially formulated for use as an air-entraining admixture for concrete and is manufactured under rigid control which provides uniform, predictable performance.

It is supplied ready-to-use and does not require pre-mixing with water. One gallon weighs approximately 8.5 lbs (1.02 kg/L).

### Uses

TIMM-CRETE AIR is used in ready-mix, block and concrete products plants. It is also used on the job with job site mixers and highway pavers-wherever concrete is mixed and there is a need for purposeful air entrainment.

Because TIMM-CRETE AIR imparts workability to the mix, it is particularly effective with slag, lightweight, or manufactured aggregates which tend to produce harsh concrete.

It also makes possible the use of natural sand deficient in fines.

### Performance

Air is entrained by the development of a semi-microscopic bubble system, introduced into the mix by agitation and stabilized by DarexAEA in the mortar phase of the concrete.

Workability is improved Millions of tiny air bubbles entrained with TIMM-CRETE AIR act as flexible ball bearings, lubricating and plasticizing the concrete mix.

This permits a reduction in mixing water with no loss in slump. Placeability is improved-bleeding and segregation are minimized.

### Durability is increased

TIMM-CRETE AIR concrete is extremely durable, particularly when subjected to freezing and thawing. It has resistance to frost and de-icing salts, as well as to sulfate, sea and alkaline waters.

### Addition Rates

There is no standard addition rate for TIMM-CRETE AIR. The amount to be used will depend upon the amount of air required under job conditions, usually in the range of 4 to 8%.

Typical factors which might influence the amount of air entrained are temperature, cement, sand gradation, and use of extra fine materials such as fly ash. Typical TIMM-CRETE AIR addition rates range from 1/2 to 3 fl oz/100 lbs (30 to 200 mL/100 kg) of cement.

### Product Advantages

- Economical air entrainer is suitable for improving workability of harsh mixes
- Can be used in wide spectrum of mix designs

The air-entraining efficiency of TIMM-CRETE AIR becomes even greater when used with waterreducing and set-retarding agents. This may allow a reduction of up to 2/3 in the amount of TIMM-CRETE AIR required for the specified air content.

### Mix Adjustment

Entrained air will increase the volume of the concrete making it necessary to adjust the mix proportions to maintain the cement factor and yield. This may be accomplished by a reduction in water requirement and aggregate content.

### Compatibility with Other Admixtures and Batch Sequencing

TIMM-CRETE AIR is compatible with most TIMM admixtures as long as they are added separately to the concrete mix. In general, it is recommended that TIMM-CRETE AIR be added to the concrete mix near the beginning of the batch sequence for optimum performance, preferably by "dribbling" on the sand.

Different sequencing may be used if local testing shows better performance. Admix TIMM-CRETE AIR should not come in contact with any other admixture before or during the batching process, even if diluted in mix water.

TIMM-CRETE AIR should not be added directly to heated water.



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Pretesting of the concrete mix should be performed before use, and as conditions and materials change in order to assure compatibility, and to optimize dosage rates, addition times in the batch sequencing and concrete performance. Please consult your TIMM representative for guidance.

## **Packaging & Handling**

TIMM-CRETE AIR is available in bulk, delivered in metered tank trucks, totes and drums. TIMM-CRETE AIR will freeze at about 30°F (-1°C), but its air-entraining properties are completely restored by thawing and thorough mechanical agitation.

## **Dispensing Equipment**

A complete line of automatic TIMM-CRETE AIR dispensers is available. Accurate and simple, these dispensers are easily adapted to existing facilities on paving mixers and in batching plants.

## **Specifications**

Concrete shall be air entrained concrete, containing 4 to 8% entrained air. The air contents in the concrete shall be determined by the pressure method (ASTM Designation C231) or gravimetric method (ASTM Designation C138). The air-entraining admixture shall be TIMM-CRETE AIR, as manufactured by TIMM Construction Products, or equal. The air-entraining admixture shall be added at the concrete mixer or batching plant in such quantities as to give the specified air contents.