



TSIRCON CO LTD

MANUFACTURERS & TRADERS
OF BUILDING MATERIALS

Ημ. έκδοσης 12/2008

TSIRCO-STRONGS

Industrial flooring aggregate

Product: Ready for use blend of strong aggregates, special additives and fillers. TSIRCO-STRONGS combines integrally with the base concrete to form a toughened surface suitable for most industrial floors.

Composition: Processed and graded with non-oxidising and chemically inert aggregates, additives and fillers.

Purpose: Trowelled into the surface of freshly casted concrete floors, it forms a toughened hard-wearing scratch-proof and dustproof surface suitable for industrial use.

Usage: Use 3-5kg TSIRCO-STRONGS per m² for light to heavy traffic. It is broadcast evenly over the surface of the freshly laid concrete and trowelled in to give a smooth finish.

Pack: 25kg multiwall paper sacks.

Advantages: TSIRCO-STRONGS provides a low cost, hardwearing, strong concrete topping of about 2-3mm thick to industrial floors depending on the application rate. It also provides a high performance, chemically resistant, free from dust industrial floor. TSIRCO-STRONGS is also the ideal base material used for any kind of floor coatings and toppings such as TSIRCO-RES 408, TSIRCO-RES 173, TSIRCO-RES SL, etc. when resistance to heavy chemicals or non staining surface is required. TSIRCO-STRONGS gives

Page 1

Head office:
Strovolos Industrial Zone,
P.O. Box 23863, 1687 Nicosia, CYPRUS.
Tel: +357 22 - 487029 , Fax: +357 22 - 487716
<http://www.tsircon.com>



TSIRCON CO LTD

MANUFACTURERS & TRADERS
OF BUILDING MATERIALS

increased resistance to abrasion and impact along with resistance to oils, fats and other industrial wastes.

Ease of use: Fast construction with minimum site costs for material handling, and no bonding problems to the base concrete.

Reduced Maintenance: Longer life and easy to clean floor leading to lower maintenance costs.

The Tsirco-Strong Process: TSIRCO-STRONGS is a blend of non-oxidising very hard aggregates and other ingredients, which are factory processed. This special blend of the material allows ease of application leading to a smooth and fairly attractive surface.

It has high resistance to abrasive wear and impact. It is a ready-to-use material which is broadcast evenly over the surface of the freshly laid concrete at the rate of 3kg-5kg per m² and then trowelled to a uniform and smooth finish.

Instructions for applying Tsirco-Strong

1. Base Concrete

The base concrete should have minimum cement content of 300kg/m³. The water/cement ratio should be kept to a minimum (0,35-0,50) with the need to produce a fully compacted concrete without excess water coming to the surface. The range of concrete additives manufactured by Tsircon of the Tsirco-Flo series can be incorporated into the mix to improve the above properties.

2. Method of laying base concrete

The base concrete shall be placed in accordance with good concrete practice. Particular care must be taken at the corners and edges of the bays, hand ramming and firm trowelling being carried out to ensure that the level can be maintained throughout the subsequent trowelling operations. Should free water be present at the surface, this should be removed if you witness bleeding, or allowed to evaporate before the application of TSIRCO-STRONGS. If you witness bleeding, then reduce the water cement ratio of the



concrete mix in the next batches, so as to prevent the recurrence of free water on the remaining bays.

3. Application of Tsirco-Strongs

The TSIRCO-STRONGS can be broadcast in one or two stages, evenly over the surface of the base concrete. The overall rate of application should be 3-5kg/m² for light to heavy traffic. Immediately after each stage of broadcasting the TSIRCO-STRONGS must be trowelled, either by hand or by means of a power float. The two broadcastings should follow one another before the concrete shows any evidence of hardening. When the final surface has sufficiently stiffened (usually about 2 hours from the time of the first trowelling) a second trowelling should be given to close any pores and remove any undulation from the surface.

4. Curing

After final trowelling and as soon as the surface has hardened sufficiently to prevent damage, if required to wet the surface with the curing compound Tsirco-CM286 which also inhibits further hardness of the surface. If high temperatures occur or strong winds prevail, it is recommended to cover the concrete with polythene sheeting for a period of about 3 days. Other standard curing methods can be used depending on climatic and other site conditions. No curing compounds that may leave a permanent film on the surface should be used, since this will prevent subsequent chemical treatment of the surface.

Technical Characteristics:

Bulk Density = 1.45kg/lt

Abrasion Resistance taber: 0.95% - 500 cycles

1.35% - 1000 cycles

Hardness: 7-8 on Mohs scale

Rate of Gain of strength

Light pedestrian traffic: 12 hours - 24 hours depending on the temperature.

Light to medium vehicle traffic: 5 - 7 days

Heavy-duty traffic: Over 10 days depending on concrete strength.

Storage Life: TSIRCO-STRONGS has a shelf life of minimum 6 months in the manufacturers undamaged, sealed bags stored in dry conditions.



TSIRCON CO LTD

MANUFACTURERS & TRADERS
OF BUILDING MATERIALS

How to Specify: Apply 3-5kg/m² of TSIRCO-STRONGS on freshly laid concrete. For curing apply 1 coat of Tsirco-CM286. If chemical resistance to aggressive chemicals is required, apply one of our Epoxy or Polyurethane range of products such as Tsirco-Seal AC, Tsirco-Res 173, Tsirco-Res 408, Tsirco-Res SL all in accordance to the instructions of the manufacturers TSIRCON CO. LTD. For further details consult our Technical Department.