

SC100W

(SPRAYABLE SILICA FUME MODIFIED MORTAR)

October, 04 Page 1 of 3

PRODUCT

TARGET® SC100W is a one-component, pre-packaged, cementitious mortar containing silica fume, latex polymer, polypropylene fibers and other admixtures designed to give a high strength, shrinkage-compensated mortar which is suitable for pneumatic application or by standard hand trowel placing procedures.

USES

TARGET SC100W is a high performance mortar suitable for new construction and repair applications. Typical uses include vertical and overhead applications to bridges, piers, beams, tunnels, parking structures, water and sewage treatment facilities, pulp and paper process areas, petrochemical process areas, dams and marine structures.

TYPICAL PROPERTIES OF TARGET SC100W

PROPERTY	TEST METHOD	TYPICAL PERFORMANCE DATA
COMPRESSIVE STRENGTH at 1 day at 7 days at 28 days	ASTM C109	3500 psi (24 MPa) 8000 psi (55 MPa) 11000 psi (76 MPa)
FLEXURAL STRENGTH at 7 days at 28 days	ASTM C348	1100 psi (7.6 MPa) 1400 psi (9.7 MPa)
BOILED ABSORPTION at 7 days Volume of permeable voids	ASTM C496	4.0% weight 10.0% volume
RAPID CHLORIDE PERMEABILITY	AASHTO -T277	<600 Coulombs

For additional information about TARGET SC100W contact your local TARGET representative.

ADVANTAGES

TARGET SC100W requires only the addition of water to give a material with the following advantages:

- Suitable for application using low nozzle velocity equipment or by hand trowel.
- Low rebound compared to conventional shotcrete (gunite).
- High early and ultimate compressive and flexural strengths.
- Excellent bond strength to properly prepared substrate surfaces.
- Provides a "breathable" surface; not a vapor barrier.

Product performance is affected by many factors, including storage, method and conditions of application and use. User testing is ESSENTIAL to determine suitability of product for intended method of application and use. Target's SOLE WARRANTY is that the product has been manufactured to specifications. No oral or written information or advice shall increase this warranty or create new warranties. Target's SOLE LIABILITY is to replace product proved defective. In no event shall Target be liable for any consequential, indirect or other damages whether arising from negligence or otherwise.

TARGET is a registered trade-mark of Tegrat Holdings Ltd. Target Products Ltd. is an authorized licensee.

T
A
R
G
E
T

P
R
O
D
U
C
T
S

L
T
D



SC100W

(SPRAYABLE SILICA FUME MODIFIED MORTAR)

October, 04 Page 2 of 3

ADVANTAGES continued

- Excellent freeze/thaw resistance.
- Sticks tenaciously to overhead and vertical surfaces.
- Low permeability and high sulphate resistance.
- Excellent barrier to chloride ion diffusion and thus enhanced resistance to corrosion of embedded reinforcing steel.

PACKAGING

- Available in 25 kg (55 lb) polyethylene-lined paper bags.

PROCEDURES

SURFACE PREPARATION

1. Correct preparation of the surface to which TARGET SC100W is to be applied is essential. Remove all loose or unsound concrete and surface contaminants such as oil, grease or dust by sandblasting or high pressure water. Where possible square cut edges of repair areas. Avoid feather edging of the repair material. Expose visible reinforcement to 100% of its circumference. To ensure a corrosion free bond sandblast all exposed reinforcing steel to remove all traces of rust or other contaminants prior to installation of TARGET SC100W. If TARGET SC100W is not installed the same day re-sandblast the reinforcement prior to installation of material.

MIXING

1. Mix TARGET SC100W into clean, potable water to obtain the required application consistency. The quantity of water used may be varied to suit the specific application needs but is usually about 7.5 lb (3.4 liters, 0.9 US gallons) per 25 kg (55 lb) bag of TARGET SC100W.
2. Add three quarters of the estimated mixing water into a paddle type mortar mixer or high shear mixer, then add the TARGET SC100W, and mix a minimum of 4 minutes. Add the remaining water as necessary to obtain the desired mortar consistency and mix an additional 2 minutes. A thicker mix works best for overhead applications. Do not over water.

APPLICATION

1. TARGET SC100W can be pneumatically applied using a conventional wet mix shotcrete, mortar or plaster pump or it can be applied by hand using a hand trowel.
2. When applying TARGET SC100W take care not to place material too far ahead of the finishing crew as TARGET SC100W can stiffen rapidly in warm weather.
3. TARGET SC100W can be finished to varying surface textures ranging from a nozzle finish, wood or rubber float finish to a smooth, steel trowel finish.

Product performance is affected by many factors, including storage, method and conditions of application and use. User testing is ESSENTIAL to determine suitability of product for intended method of application and use. Target's SOLE WARRANTY is that the product has been manufactured to specifications. No oral or written information or advice shall increase this warranty or create new warranties. Target's SOLE LIABILITY is to replace product proved defective. In no event shall Target be liable for any consequential, indirect or other damages whether arising from negligence or otherwise.

TARGET is a registered trade-mark of Tegrat Holdings Ltd. Target Products Ltd. is an authorized licensee.



T
A
R
G
E
T

P
R
O
D
U
C
T
S

L
T
D

SC100W

(SPRAYABLE SILICA FUME MODIFIED MORTAR)

October, 04 Page 3 of 3

CURING

Proper moist curing is very important for all cement-based materials. Commence curing immediately after the finishing is complete, using continuous moist curing for a minimum of 3 days. A curing compound meeting ASTM C309, such as TARGET Cure & Seal, may be used after an initial 24 hours of moist curing. Ensure that no curing compound gets onto surfaces to which mortar is to be applied at a later date as it may affect bonding.

TEMPERATURE

DO NOT apply TARGET SC100W at temperatures below 5°C (41°F) or above 30°C (86°F). Protect from freezing for a minimum of 24 hours after placement.

YIELD

The approximate yield of SC100W is 0.47 ft³ per 55 lb bag, 57 bags per yd³ or 74 bags per m³. The exact yield will depend on the amount of water added.

CAUTION

TARGET SC100W is darker than normal concrete. When color match is a consideration a test application should be made.

T
A
R
G
E
T

P
R
O
D
U
C
T
S

L
T
D

Product performance is affected by many factors, including storage, method and conditions of application and use. User testing is ESSENTIAL to determine suitability of product for intended method of application and use. Target's SOLE WARRANTY is that the product has been manufactured to specifications. No oral or written information or advice shall increase this warranty or create new warranties. Target's SOLE LIABILITY is to replace product proved defective. In no event shall Target be liable for any consequential, indirect or other damages whether arising from negligence or otherwise.

TARGET is a registered trade-mark of Tegrat Holdings Ltd. Target Products Ltd. is an authorized licensee.

