

## MULTIMORTAR 845 MP

### Fatigue Resistant Metallic Aggregate High Strength Mortar for Bridge Nosing, Highways and other Concrete Surface Repairs

#### Specification Type

Meets requirements of CRD-C621, ASTM C 109-80, and CRD-C266-79 specifications

#### Description

MULTIMORTAR 845 MP a pre-mixed mortar comprising processed ductile metallic and liaceous aggregates with natural pea gravel, blended hydraulic cements and controlled proprietary chemicals, producing a non-shrink, high strength and fatigue resistant mortar. When mixed to a slump of approximately 40mm it provides a thixotropic mortar that can be puddled into place requiring only hand tamping for compaction

#### Advantages

- \* Fatigue Resistance - the inclusion of a ductile metallic aggregate provides greater fatigue resistance, increased density and extra protection in high frequency traffic conditions
- \* Excellent Bond - good bond to steel and existing concrete surface.
- \* Durability - the unique catalyzing process produces a controlled void filling action. In its hardened state seals off capillaries and surface pores ultimately increasing durability - 65% denser than plain concrete.
- \* Non-shrink - a dense matrix that is free of bleeding, settlement of drying shrinkage.
- \* High Strength - obtains a minimum compressive strength in 24 hours of 22 MPa facilitating rapid installation and repairs allowing early exposure to traffic. N.B. Rapid setting formulations available on request.
- \* Reliability - a pre-mixed mortar thus eliminating the problems frequently experienced on site with the selection of suitable raw materials, mixing control and placing

#### Typical Applications

- \* Designed specially for the construction and / or reconstruction of bridge nosings which are subjected to repetitive traffic conditions
- \* Suitable for both reinforced and un-reinforced joints
- \* Repairing floors, concrete highways and parking areas subjected to heavy and high traffic surface wear

#### Strength Development

Age	Compressive MPa	Flexural MPa
9 hours	5.0	0.9
12 hours	9.1	1.6
1 day	22.5	3.8
3 days	41.5	5.7
7 days	54.0	6.4
28 days	65.0	7.8

#### Direction for Use

- \* All surfaces in contact with the mortar must be sound, dense and clean and an evenly scabbled textured surface is required. All laitance and unsound material must be removed. Surface must be pre-saturated for 12 hours to thoroughly dampen the concrete and any free water must be removed just prior to placing
- \* A slush / bond coat consisting of neat Portland Cement or MULTIMORTAR 845 MP should be brushed onto the surface prior to placing. At no time should the slush / bond coat be permitted to dry out. Alternatively use MULTIPOXY 1305 wet to dry epoxy adhesive as the bonding mechanism.
- \* MULTIMORTAR 845 MP should be mixed to the required consistency, a slump approximately 40mm, pulled into place and consolidated using a steel brush.
- \* Surfaces can be screeded to levels and finished with a wooden float. Do not mix more more mortar than can be used in approximately 45 minutes. Once mortar has stiffened, do not re-temper by adding water.

**Note:** Water demands must be verified on site as environmental and placing conditions can influence mortar / water requirements.

#### Curing

Careful attention to curing of the exposed surfaces must commence immediately. As soon as the surfaces are sufficiently firm, wet burlap, hessian or biddim must be placed over the exposed areas and kept saturated for 24 hours. After 24 hours apply MULTICURE 300 C OR 300 W curing compound.

**N.B:** Surface must be wet cured for the initial stage of curing.

#### Yield

One 25kg bag of MULTIMORTAR 845 MP when mixed with 3 litres of water will yield approximately 10 litres (100 x 25kg bags per m3)

#### Packaging

Supplied in 25kg double lined moisture resistant bags

#### Storage

Up to 1 year when stored under cover and in dry conditions

#### Quality Assurance

MCC LIMPOPO's production and testing programmes comply with all local standards. These stringent testing requirements must also comply with ASTM C 109-80, CRD-C 621, CRQ-C 226-79 and Specifications for Flowable Grout / Mortars