

ASPPC Cold Mix for Pothole Patching and Repair (ASPPC 208)

- **ASPPC 208** is a mixture of emulsified asphalt and aggregate produced, placed and compacted at ambient air temperature. ASPPC 208 is the environmental choice.
- **ASPPC 208** is an asphalt mix specially designed for ready to use for pothole patching and repair. **ASPPC 208** is produced by combining asphalt emulsion and suitable mineral aggregate; both are carefully selected for the intended use. According to the Egyptian code 2008.

Features

- Environmentally friendly.
- Not toxic.
- Resists bleeding and stripping.
- Suitable for use in pothole repair with many techniques and for pavement.
- Provides durable and flexible wearing surface with minimal cracking.
- Easy to handle, shovel, spread and compact.
- Opens the way for the passage immediately after the compaction.
- Can be stored in stockpiles.
- Can be packed in suitable polyethylene bags.
- Have a long storage life.
- It is cost effective.

ASPPC 208 Mix Design

- **ASPPC 208** is composed of two main elements: cationic asphalt emulsion CMS-2 and suitable mineral aggregate. The CMS-2 is produced in ASPPC plant according to international standard specification ASTM D2397. The mineral aggregates are selected from the local quarries.
- Asphalt emulsion content in the total mix is calculated in such a way that the residual asphalt binder content in the total mix is 4.0-6.0% wt.
- **ASPPC 208** is designed according to the Egyptian code for roads 2008 part 4 and according to Asphalt Institute MS-19.

Application instructions

Many repair techniques can be applied as Throw-and-roll, Semi-permanent, Spray injection and Edge seal.

General steps:

1. Straighten pothole edges making sides as vertical as possible. This can be done using a jackhammer, pavement saw, or milling machine, etc.
2. Remove water and debris from the pothole, using a broom, shovel, compressed air or whatever is available, (figure (a)).
3. Apply prime coat in a rate of 1.5 kg/m^2 , or tack coat in a rate of 0.5 kg/m^2 according to type and the grave depth.
4. Check the workability of the mix.
5. After about $\frac{1}{2}$ to one hour (according to the weather conditions) place the mix by hand using a shovel and rake. Placement should be made in no more than 7.6 cm lifts, (figure (b)).
6. Compact patch from the center towards the edges to provide better compaction at the edges and corners several times. Hand devices such as a vibratory plate compactor or single-drum vibratory rollers are recommended.



Figure (a): clean pothole and apply tack coat



Figure (b): Spread the mix

7. In no case the thickness of a single layer is more than 5 cm, if the hole thickness is of 10 cm or more, a layer thickness of 5 cm is placed and compacted and then put another layer thickness of 5 cm and compaction and so on.
8. Opens the way for the passage immediately after the compaction.

Coverage

- About 90 – 100 kg/m².

Storability

ASPPC 208 can be stored in stockpiles for about one month. It can be stored in polyethylene bags for about six months, if taken into account the ideal storage conditions.

Packing

ASPPC 208 is packed in polyethylene bags of 25 kg weight.

Health & Safety

- **ASPPC 208** is non toxic to eyes or skin.
- Workers should wear protective masks, gloves and goggles during application.
- No special precautions are needed since it is water based non flammable material.

Precautions

- Working temperature of **ASPPC 208** is the ambient temperature; in all cases the working temperature not exceeding 50°C.