

Hydromedia

FASTER DRAINING THROUGH CONCRETE



bringing materials to *life*



**Performance
Quality
Innovation**

Hydromedia™ is an ideal solution for surface and storm water management. Typically containing at least 20% void space, allowing water to pass directly through at a permeability of 8 - 264 gal/min/sq yd

Applications

- Commercial and residential parking lots
- Pavements, bike & pedestrian pathways
- Patios
- Courtyards
- Swimming pool decks
- Alleyways
- Driveways
- Pavement edge drains and gutters

Advantages of Hydromedia™

In common with standard Pervious:

- Contributes to a cost-effective Sustainable Urban Drainage System (SUDS)
- Eliminates need for detention ponds
- Offers space saving for more efficient land development
- Mitigates surface pollutants

Additional advantages of Hydromedia™:

- Robust wearing surface
- Faster draining
- Smooth clean look
- Ease of placement
- Low compactability

Technical features

1. Workable for up to 90 minutes
2. Flexural strength of 217 - 435 PSI
3. Slump approx 6"
4. Void content: Minimum 20%
5. Typical Nominal Maximum Aggregate size: ½" (May vary according to regional availability)

Safety features

Reduces glare from wet pavements

Eliminates water accumulation from heavy rain

Safety precautions

The use of safety goggles, hard hat, ear defenders and gloves is recommended when placing concrete.

The standard rules for good concrete practice and placing must be strictly observed.



First Aid

Eyes: Immediately flush eyes, including under lids, with water for at least 15 minutes to remove all particles. If necessary, seek medical advice

Skin: Wash skin with cold water and a pH neutral soap as soon as possible, except where open wounds are visible. Attention should be paid to wounds and fresh scars which should be covered with protective paraffin gauze. Seek medical help in cases of prolonged contact with wet concrete.

Ingestion: Rinse mouth with clean water. If swallowing has occurred drink plenty of milk or water. Do not induce vomiting. Seek medical attention immediately.

Inhalation: Move to fresh air. If symptoms persist seek medical attention.

Design

There are two factors that determine pavement system design thickness:

- Hydraulic properties such as permeability (related to yearly average rain fall) and volume voids (related to water storage)
- Structural properties such as flexural strength offering better load bearing properties
- Selection of appropriate Hydromedia™ properties is dependent on the more dominant between:
 - Hydrological requirements
 - Load bearing requirements

The larger of these values governs design thickness.

Subgrade & Subbase preparation

- Consult geotechnical engineer
- Uniform (level) subgrade support
- Larger of two values governs design thickness
- Compact subgrade to 90 – 95% of theoretical density
- Increasing compaction decreases permeability
- Stable subbase required, crushed aggregates recommended

Delivery

- Concrete retention is 90 minutes
- Rapid drying requires specialist handling and curing
- Concrete transfer can be done by either off the truck or using concrete conveyer. Pumping is not recommended.

RECOMMENDATIONS

Placement

- Higher fluidity promotes ease of placement
- Placement should be continuous and rapid
- Can be paver laid. Recommended Pavers are available upon request
- Avoid over working the concrete, especially after striking off and finishing.
- Use recommended placement method.

Striking off

- Conventional forms to be used
- Vibrating screeds or standard screeds and roller compacters can be used for strike off
- Riser strips are not recommended due to minimal compaction that occurs with Hydromedia™
- Do not over vibrate or work the top surface

Compaction and finishing

- Compact with steel roller compactors or vibrating plates or pavers to height of forms
- Hand tamp near edges and other places not reached
- Complete compaction within 15 minutes of placement
- No floating or trowelling
- Minimize over working or movement of the surface after compaction. This includes walking on the surface.

Jointing

- Contact your local technical representative for further information
- It is recommended to place joints immediately after compaction. Otherwise saw cuts are possible after 7 days of curing.

Curing & Protection

- Fog mist the surface within 20 minutes of compaction
- Cover with thin plastic sheeting within 20 minutes after placement and leave in place for 7 days
- Some curing compounds may also be used

Maintenance

- Design site to minimize flow of soil and leaves to pavement
- Vacuum annually or when clogging test indicates the necessity, alternatively try pressure washing

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