



Concrete Weavers LLC

it's a concrete miracle

USER GUIDE:
GENERAL / CLIENT DIRECT BOARD / CLIENT CONTROL GENERAL

PRESENTATION

- ▶ Concrete Weavers is a new and revolutionary construction material called concrete rolls or concrete cloth. Essentially it is concrete on a roll.
- ▶ The finished product is a combination of two geotextiles with a dry concrete mix in between. The product initially is flexible and can be put in any shape desired. Once water is applied to it, it starts to set and becomes hard. No need for plant or mixing equipment on site, just add water.
- ▶ The bottom layer is a woven geotextile and the top layer is a non-woven geotextile.
- ▶ Between the top and the bottom layer, there is a special Concrete Weavers dry mix, developed by a Dutch company with many references such as; Nakheel Mall UAE , Abu Dhabi Plaza Skyscraper, Kazakhstan, Coen Underwater Tunnel Netherlands, Port house Belgium, Cairo's Grand Egyptian Museum Egypt, etc.
- ▶ Top and bottom layers are connected by needle punching technology.
- ▶ Concrete Weavers are available in 2 different thicknesses and strengths; the civil model used for erosion control, irrigation, ditch lining, dust suppression etc. and the military model used for runway construction over all kind of terrains, temporary parking for planes and vehicles, temporary military roads etc.



Concrete Weavers GCCM physical properties

| Product | Nominal Thickness (mm) | Batch Roll Size (m ²) | Bulk Roll Size (m ²) | Roll Width (m) |
|-------------|------------------------|-----------------------------------|----------------------------------|----------------|
| CW CIVIL | 8 | 10 | 100 | 1 |
| CW MILITARY | 18 | N/A | 100 | 1 |

1) Bulk Rolls / Batched Rolls / Mass Rolls / Batched Rolls / Grouped Rolls / Clustered Rolls / Ro Rolls Volume / Rolls Size / Rolls Measurement / Rolls Dimension:

- Concrete Weavers is available in two arrangements (roll/move sizes); Bulk/mass rolls or littler, man portable grouped or batched rolls. The quantity per rolls differs between the Concrete Weavers thickness as shown in the table above.
- Bulk/Mass rolls weigh between in the range of 1.5Ton & 1.6Ton & are supplied on 6 inch cardboard centers which can be hung from a spreader beam/bar & unrolled using suitable plant equipment (see right). Mass rolls give the quickest method of laying Concrete Weavers & have the extra advantage of reducing the number of joints required. Contact Concrete Weavers for spreader Beam/Bar buy. Batched rolls are supplied on 3 inch cardboard centers with carry handles designed as a 2 to 4 man lift. All Concrete Weavers thicknesses can be supplied batched to custom lengths for a little extra charge.
- Concrete Weavers is currently available in Wide Rolls of up to 4 multiple times the standard roll width. Contact Concrete Weavers for further details.

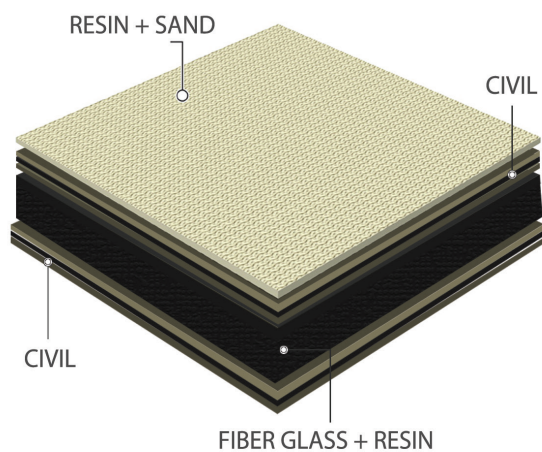
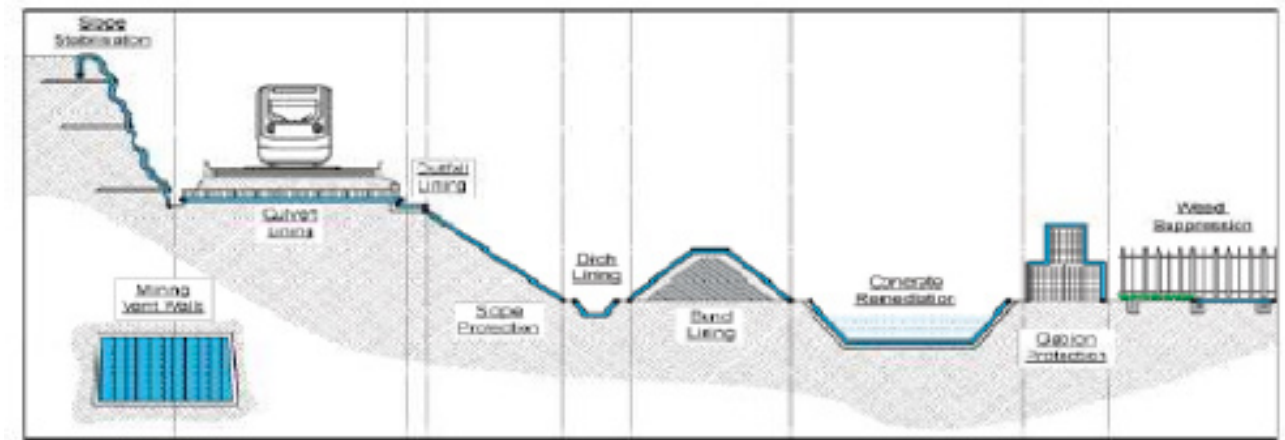
2) Packaging / Transportation / Process of Packing Goods :

- Concrete Weavers Bulk rolls are exclusively wrapped & palletized on heat treated wooden beds estimating 1.2m x 1.0m. Concrete Weavers bunched rolls are similarly supplied, exclusively/ separately wrapped in airtight PE packaging & palletized. 12 Batched Rolls fit onto a standard 1.2m x 1.0m pallet. All Concrete Weavers rolls are furnished with a fundamental hydration guide in English.
- Normal/common container stuffing quantities are shown below, for full details o packing weights & dimension or measurements please refer to the Concrete Weavers Shipping Information document/ record.



Applications / Implementations

- Concrete Weavers is ordinarily used to replace traditional/customary/ordinary concrete (in-situ, precast or splashed or showered) for slope protection/disintegration control, remediation and constructions development applications. Some regular/ordinary examples are given below.



CIVIL

- a) **Channel Lining:** Concrete Weavers can be used for ditch lining and irrigation. It is significantly faster, easier and less expensive to install than traditional concrete channel and ditch lining and requires no special equipment on site. The rolls can be laid and installed at a rate of up to 250m² per hour by a small team.



- b) **Erosion Protection:** Concrete weavers can be used for slope protection as an easy and less expensive alternative for classic concrete structures. Becomes hard after hydration but still has some flexibility to prevent the concrete from cracking. Mostly used for protection against mud slides and rocks falling down the slope.



- c) **Remediation:** Concrete weavers can be used to rapidly reline and refurbish existing concrete structures suffering from degradation and cracking.



MILITARY

a) **Aircraft Runway and Parking:** The military version of the concrete weavers can be used for aircraft runways and temporary parking spots for vehicles and aircrafts. By covering compacted sand runways with concrete weavers it prevents dust entering the engines.

The biggest benefit for this application is the fast and easy installment. The mixture of sand and resin layered on top of the concrete weavers makes the runway slip resistance.

b) **Bunkers and Storage Protection:** Covering storages and bunker sand bags with concrete weavers makes it more armored and prevent the sandbags from falling apart.



Concrete Weavers Key Properties

- ▶ **Flexible:** Concrete Weavers are highly flexible before hydration. This allows the roll to closely follow the ground profile and fit around existing infrastructure. After hydration it has a certain flexibility to prevent cracking.
- ▶ **Water Proof:** Concrete Weavers are highly impermeable after hardening.
- ▶ **Strong:** The specifically for concrete weavers created dry mix becomes very strong after hydration. The military version is an extra strong version of the concrete weavers.
- ▶ Please refer to the data sheet.
- ▶ **Environmental Durability:** (minimum 50 year expected life)
 - Freeze-Thaw testing (ASTM C1185) $\pm 20^{\circ}\text{C}$ --- 200 Cycles
 - Freeze-Thaw testing (BS EN 12467:2004) $\pm 50^{\circ}\text{C}$ --- 100 Cycles



Office Address:
Opal Tower, Office 1104, Burj Khalifa Street,
Business Bay, Dubai – UAE.

Tel: +971 4 876 8639

Sheikh Saeed Al Maktoum Complex, Warehouse #86,
Industrial Area 1, Jebel Ali, Dubai – U.A.E.

Mobile: +971 52 985 0269 | Tel: +971 4 451 9899

Email: info@concreteweavers.com | Web: www.concreteweavers.com

