

# CINLE CRIB-LOCK

## The Erosion Protection System



ISO 9001: 2015  
Approval No.  
ISO 9001-0049900



**CINLE**

Concrete Products Industries Sdn. Bhd. (216631-X)



# CINLE CRIB-LOCK

## The Erosion Protection System

The **CINLE CRIB-LOCK** erosion protection system has been designed as a cost effective solution to the problems of erosion. The system forms an armoured mat of precast concrete crib-locks with enough flexibility to adhere to nature's uneven contours and seasonal variations.

The interlock within the **CINLE CRIB-LOCK** erosion protection system is achieved through the use of dove-tail joints on all sides of each crib-lock.

The perforation pattern neutralizes the pressure caused by changing water levels and absorbs the energy from waves, currents and turbulent water. This same pattern permits surface drainage and also forms a perfect 'finger hold' to ease handling. The voids can be filled with granular material or with topsoil to permit the growth of vegetation. **CINLE CRIB-LOCK** can be used in conjunction with other systems such as gabion baskets, concrete curbs and retaining walls. The relatively smooth finish invert, permits easy sediment removal.

**CINLE CRIB-LOCK** has a proven track record due to its numerous uses and various applications.

CINLE uses only premium quality materials in the **CINLE CRIB-LOCK** erosion protection system, producing a durable and maintenance free system. The concrete blocks are produced on a brand new 'state of the art' manufacturing line which ensures an end product of fine appearance and consistent quality. Corrosion resistant crib-lock with sulphate resistant concrete to Class 1 are also available on request. Our dedication to quality and service with a personal touch ensures complete customer satisfaction.



Floodplain Protection



Lagoons



Installation

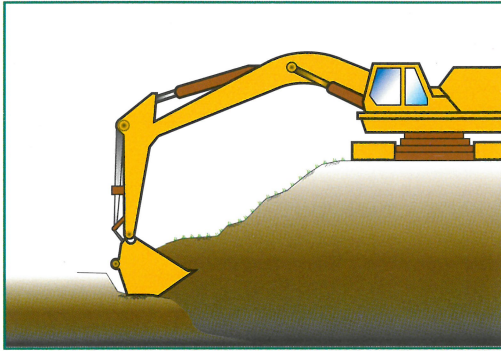
### Uses of CINLE CRIB-LOCK Erosion Protection System

- Shore protection, flood control, land reclamation projects and dredging works
- Dyke embankments, hydraulic and water erosion construction projects.
- Highway, road, rail and bridge embankments.
- River channel construction, waterway slopes, power plant and dam construction, culverts, pipelines and irrigation channels.
- Harbour bottom protection, ship berths, dock beds, sluices break water protection, pier works, general harbour construction.
- River crossings or temporary roads and boat launching ramps.
- New aqua-culture systems.
- Lagoon and Marinas



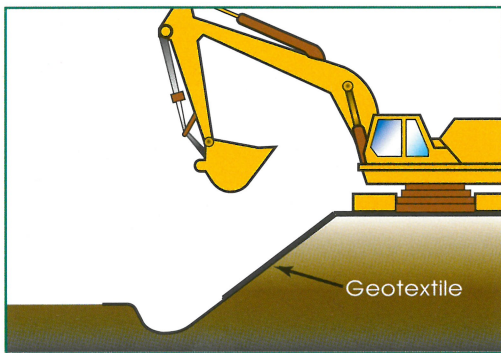
# CINLE CRIB-LOCK Installation

Installation of the CINLE CRIB-LOCK Erosion Protection System requires only **THREE** steps:-



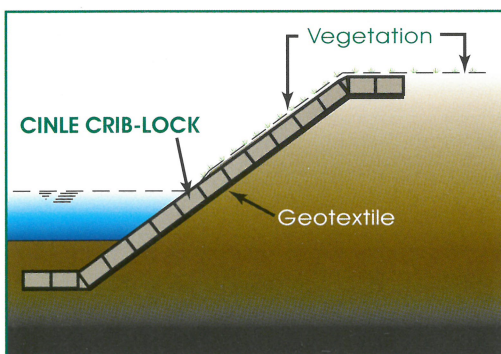
## 1. The Subgrade Preparation

The system generally is installed directly onto existing subgrade material following shaping and compaction operations. Equipment suitable for subgrade preparation includes dozers, backhoes and telescopic excavators. Where the condition of the subgrade material precludes satisfactory machine-trimming to the earthworks design profile, it is generally recommended that a nominal bedding layer of well-graded granular material be placed on the subgrade to facilitate accurate shaping.



## 2. Geotextile Placement

Sections of geotextile, dimensioned according to field requirements, are unrolled onto the prepared subgrade and temporarily secured in position with stakes with adjacent sections of geotextile overlapped a minimum of 300mm. Complete coverage of the protected area is essential. Outer edges of the protection, particularly those subject to hydraulic flow and seepage, should be dug into the subgrade a minimum of 150mm.



## 3. Installation

Manual placement of individual crib-lock frequently is the most efficient method of dry installation, especially on projects where irregular alignment or protection profile is involved. Manual crib-lock installation is also recommended on small or confined projects. Crib-locks are delivered and off-loaded at the site in bundles. Individual crib-locks are then placed directly onto the geotextile. There is only one way that the **CINLE CRIB-LOCK** can be inter-connected, making the mat a sound erosion protective system.



Shore Protection

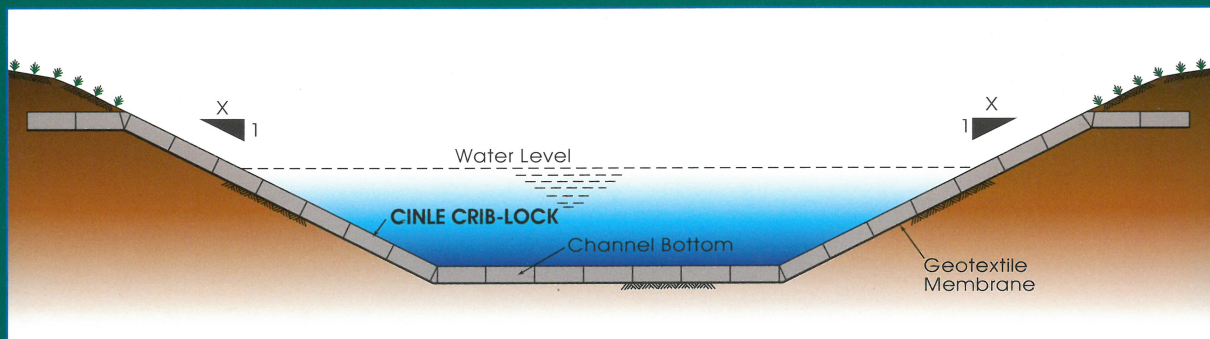
## Benefits of CINLE CRIB-LOCK Erosion Protection System

- Fast installation at site
- Flexibility, the crib-locks can be lifted and reused.
- Underwater installation possible.
- Different weights and sizes available for optimum design.
- Can be installed without specialist labour.
- Resistant to wave attack.
- Encourages plant growth - environmentally acceptable.
- Economic

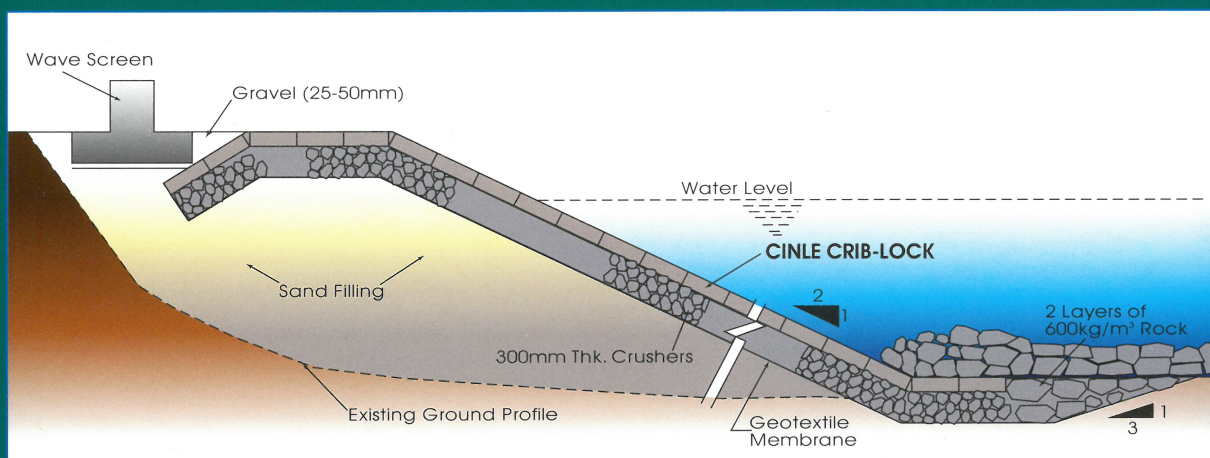


# CINLE CRIB-LOCK

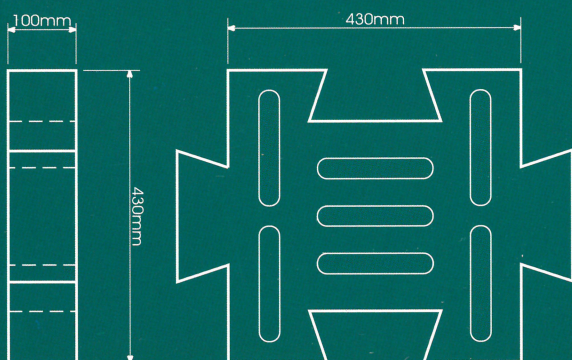
## The Erosion Protection System



**TYPICAL SECTION OF CHANNEL WITH CINLE CRIB-LOCK LINING**  
Not To Scale



**TYPICAL SECTION FOR SHORELINE PROTECTION**  
Not To Scale



### Specifications:-

|                   |                               |
|-------------------|-------------------------------|
| Material          | : Precast Concrete            |
| Dimensions        | : 430mm x 430mm x 100mm Thick |
| Weight            | : 34.5kg                      |
| Ground Coverage   | : 5.4 pieces/m <sup>2</sup>   |
| Concrete Strength | : 40mPA                       |
| Manning's "n"     | : 0.0196                      |
| Minimum Radius    | : 1.5 metres (5 ft.)          |
| Bundle Size       | : 24 pieces bundles           |

\*Due to constantly improved products, specifications may change without prior notice.



**CINLE**

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