## OKA RC L-SHAPE WALL

## FUNCTIONS OF OKA L-SHAPE WALL:

- Open Drains
- Retaining Wall
- Used as Storage/Fencing Walls


## ADVANTAGES OF OKA L-SHAPE WALL:

- Finish products manufactured with dimensional accuracy and consistency under control factory environment.
- Simple application and maintenance free products.
- OKA L-shape wall can be off loaded directly from transport and assembled in a single operation.
Easy in handling and laying.


## HANDLING OF OKA L-SHAPE WALL:

Site Stacking - OKA L-shape wall shall be stacked on leveled ground at site.

Site Laying/Installation - OKA L-shape wall shall be laid on well compacted ground bedding.

Joints - OKA L-shape wall comes with plain butt joints. Gaps in between normally to be filled up with cement-sand mortar.

TYPICAL IMPOSED LOADING ON OKA L-SHAPE WALL:


## DESIGN CRITERIA:

- Structural design is in accordance to BS 8110 .
- Hydrostatic pressure is not considered in design as 50 mm weep hole will be provided to relieve water pressure behind the wall.
- Design loadings are generally categorized in 3 types:

Open Drain - Short leg backfill with granular soil
Type 1: Level backfill with $10 \mathrm{kN} / \mathrm{m}^{2}$ of live load surcharge
Type 2: Non level backfill with max of 600 mm height from top of wall and slope gradient of $30^{\circ}$

Retaining Wall - Long leg backfill with granular soil
Type 3: Level backfill or non-level backfill similar to above type 1 and type 2 loading condition

## MATERIAL SPECIFICATION:

- Concrete grade shall be $40 \mathrm{~N} / \mathrm{mm}^{2}$
- Concrete cover $=30 \mathrm{~mm}$
- Bulk density of backfill soil to be $19 \mathrm{kN} / \mathrm{m}^{3}$
- Bulk density of backfill soil to be $19 \mathrm{kN} / \mathrm{m}^{3}$



## TYPICAL PRECAST L-SHAPE WALL PROPERTIES



OKA PRECAST DWF UNIT


| STANDARD DIMENSIONS OF OKA L-SHAPE WALL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Applicable For All Loading Conditions (Type 1, 2 \& 3) |  |  |  |  |  |
| H (mm) | B (mm) | tw (mm) | ts (mm) | bt (mm) | Weight per unit (tonne) |
| 915 | 1080 | 100 | 100 | 150 | 0.49 |
| 1220 | 1250 | 100 | 100 | 300 | 0.62 |
| 1520 | 1420 | 100 | 100 | 300 | 0.72 |
| 1830 | 1690 | 150 | 150 | 300 | 1.22 |
| 2130 | 1990 | 150 | 150 | 300 | 1.41 |
| 2440 | 2300 | 150 | 150 | 300 | 1.59 |
| 2740 | 2600 | 200 | 200 | 300 | 2.45 |
| 3050 | 2910 | 200 | 200 | 300 | 2.72 |
| 3350 | 3210 | 200 | 200 | 300 | 2.97 |
| 3660 | 3520 | 200 | 200 | 300 | 3.23 |

Above are standard OKA L-Shape wall dimensions and generally recommended with max. 200 mm capping beam height. Starter bars shall only be provided upon request if required for the construction of insitu capping beam.

Standard length of OKA L-Shape Unit is 1000 mm . Non standard sizes with different loading conditions can be specially designed and manufactured upon request.

## OKA CONCRETE INDUSTRIES SDN. BHD. <br> (67634-M)

