



## **PRECAST RC L-Shape Walls**



# STANDARD PRODUCT RANGE (WALL HEIGHT) : $900 - 3600 \, \text{mm}$

**SPECIAL DESIGN**: G-Cast is able to design and manufacture special design L-Shape Walls to suit individual project requirements

G-CAST manufactures a wide range of precast concrete L-shaped walls with standard wall height from 900mm to 3600mm. All products are manufactured under a Quality Management System complying to ISO 9001:2008.

### **MATERIAL AND DESIGN SPECIFICATIONS**

#### **Materials**

Concrete characteristic strength at 28 days,  $f_{cu}=40\ N/mm^2$  Nominal concrete cover : 30 mm

Cement of pulverized fuel ash cement which warrants lower permeability and higher long term durability and long term strength.

#### **Soil Parameters**

Bulk density of backfill soil = 19 kN/m<sup>3</sup>

Soil angle of internal friction 30°

Coefficient of active lateral earth pressure = 0.33

#### Design

Hydrostatic pressure is eliminated by provision of weep holes along the center line of side wall and free draining granular backfill at the back of the walls.

RC design in accordance with BS.8110

### STORAGE AT SITE

G-Cast L-shaped walls are to be stacked at site on level and stable ground with stacking timbers to avoid undesirable forces that may cause cracking.

### **LAYING**

G-Cast L-shaped walls must be laid on level and compacted bedding to ensure uniform support is provided. Please refer to G-Cast Technical support team on the requirement of ground bearing pressure capacity.

## **JOINTING**

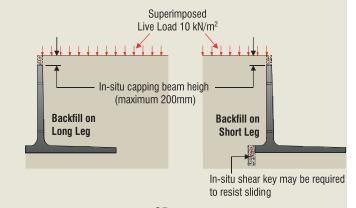
G-Cast L-shaped walls of standard unit length 1.000 metre come with butt end joints and whenever necessary, cement-sand mortar is used to close up gaps.

## STANDARD DESIGN LOADING CRITERIA

(either TYPE 1 or TYPE 2)

#### **TYPE 1 LOADING**

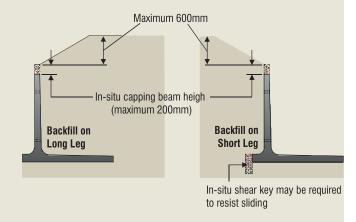
Level backfill with superimposed live load of 10 kN/m<sup>2</sup> behind wall, with a maximum 200mm in-situ capping beam height.



OR,

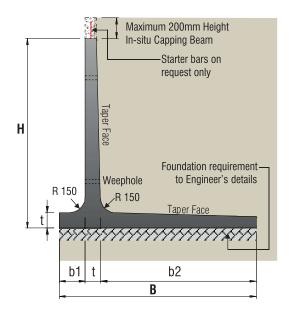
## **TYPE 2 LOADING**

Sloping backfill up to 600mm height, without superimposed live load, and with a maximum 200mm in-situ capping beam height.



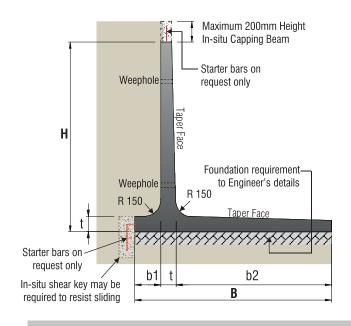
Please kindly refer to G-Cast's Technical Team for customized design if the loading criteria is different from the abovementioned TYPE 1 or TYPE 2 loadings.

## **BACKFILL ON LONG LEG**



H (mm)	B (mm)	t (mm)	<b>b1</b> (mm)	<b>b2</b> (mm)	Product Weight (ton)
900	950	100	150	700	0.42
1200	1100			850	0.50
1500	1300			1050	0.59
1800	1550	150	250	1150	1.07
2100	1700			1300	1.20
2400	1900			1500	1.32
2700	2100		300	1600	2.01
3000	2300	200		1800	2.18
3300	2450	200		1950	2.33
3600	2600			2100	2.47

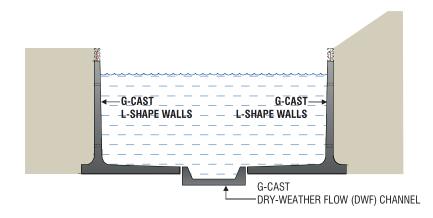
## **BACKFILL ON SHORT LEG**



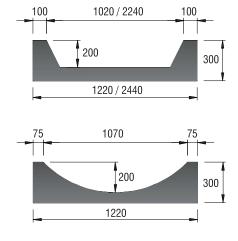
н	В	t	Ь1	Ь2	Product Weight
(mm)	(mm)	(mm)	(mm)	(mm)	(ton)
900	950	100	150	700	0.42
1200	1100		200	800	0.50
1500	1300		300	900	0.60
1800	1550	150	300	1100	1.08
2100	1700		300	1250	1.20
2400	1900		350	1400	1.33
2700	2100	200	350	1550	2.01
3000	2300		400	1700	2.19
3300	2450		450	1800	2.35
3600	2600		600	1800	2.51

## **OPEN CHANNEL CONSTRUCTION** USING G-CAST PRECAST L-SHAPE RETAINING WALLS

c/w DRY-WEATHER FLOW (DWF) CHANNEL



## **G-CAST DRY-WEATHER FLOW (DWF) CHANNEL**





## **G-CAST CONCRETE SDN BHD** (971228-X)

A-1-3A, Pusat Perdagangan Kuchai No. 2, Jalan 1/127, Off Jalan Kuchai Lama 58200 Kuala Lumpur, Malaysia

**T**: +603 7982 8168 **F**: +603 7982 8068

www.g-cast.com.my

#### Factory :

- Plot 6, Jalan Bunga Azalea 1/2, Kawasan Industri Jalan Bunga Azalea 48200 Serendah, Selangor Darul Ehsan, Malaysia.
- Lot 647, Jalan Kulai Kota Tinggi, Mukim Ulu Sungai Johor, Kota Tinggi, Johor Darul Takzim, Malaysia
- Lot 12448-12473, Kawasan Perindustrian Bidor, Mukim Bidor, Daerah Batang Padang, 35500 Perak Darul Ridzuan, Malaysia.
- Lot 1561, Kampong Stesen, Sungai Choh, 48000 Rawang, Selangor Darul Ehsan, Malaysia.
- No. 1, Jalan Starken, Batu 5, Jalan Mawai, 81900 Kota Tinggi, Johor Darul Takzim, Malaysia.



Distributed by: