INTERNATIONAL CONSTRUCTION CONSORTIUM (PVT) LTD

PRE-CAST PRODUCTION

PRE-CAST CONCRETE PIPE

DATA SHEET

ICC PRECAST
FAST - QUALITY - INNOVATIVE

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01. INTRODUCTION

International Construction Consortium (Pvt)Ltd is a leading manufacturer of reinforced concrete pipes and associated precast products in Sri Lanka. Precast pipe are available in a wide range of diameters and confirming to different standards.

The manufacturing of pipe is done by using roller suspension system and vertical casting system with high quality controlling and quality assurance systems under engineer supervisions.

This publication provides the information necessary to specify precast concrete pipes for all of these applications.

02. GENERAL SPECIFICATIONS

STANDARD SPECIFICATION

SLS Standard 452 : 1979
NP 2 / NP3 Class
AASHTO Specifications
Class - I / II / III / IV
BS Standard 5911 : Part 100 : 1988
Class - L / M / H

PRODUCTION SPECIFICATION

Dimensions: Refer the table
Concrete Strength(N/mm^2): Grade 40
Connecting Type : Tongue & Groove

RAW MATERIAL SPECIFICATION

Cement: SLS 107 : 2015
: BS EN 197 - 1:2011
Fine Aggregate: BS 882 - 1992
Coarse Aggregate: BS 882 - 1992
Reinforcement Steel : SLS 375 : 2009
Water : BS 3148 - 1980

03. PRODUCTION RANGE

DIAMETER (MM)	TYPE OF PRODUCTION			
	NP2 TYPE	NP3 TYPE	AASHTO	BS STD
300	✓	—	—	✓
450	✓	✓	✓	✓
600	✓	✓	✓	✓
750	✓	✓	✓	✓
900	✓	✓	✓	✓
1200	✓	✓	✓	✓
1500	✓	✓	✓	✓

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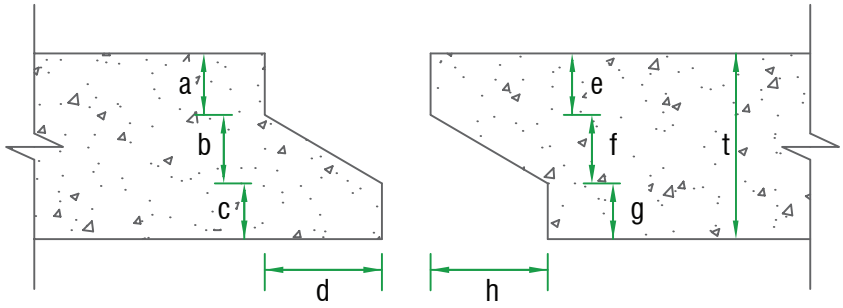
04. PIPE EDGES DETAILS

* Pipe length: 2400 mm



NP2 TYPE

Diameter (MM)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	t (mm)	Weight (kg) Avg.
300	17	4	14	20	14	4	17	20	35	220
450	21	6	18	25	18	6	21	25	45	410
600	23	7	20	30	20	7	23	30	50	600
750	30	27	33	50	33	27	30	50	90	1400
900	25	10	20	35	20	10	25	35	55	960
1200	24	25	21	40	21	25	24	40	70	1650
1500	30	27	23	40	23	27	30	40	80	2400

NP3 TYPE

Diameter (MM)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	t (mm)	Weight (kg) Avg.
450	30	18	27	30	27	18	30	30	75	720
600	30	24	26	45	26	24	30	45	80	1000
750	30	27	33	50	33	27	30	50	90	1400
900	33	38	30	63	30	38	33	63	101	1850
1200	33	64	30	63	30	64	33	63	127	3100
1500	33	89	30	63	33	89	33	63	152	4650

AASHOT-Class IV and BS Class-M can be cast as per the necessary requirements.

05. HANDLING AND TRANSPORTATION & STACKING

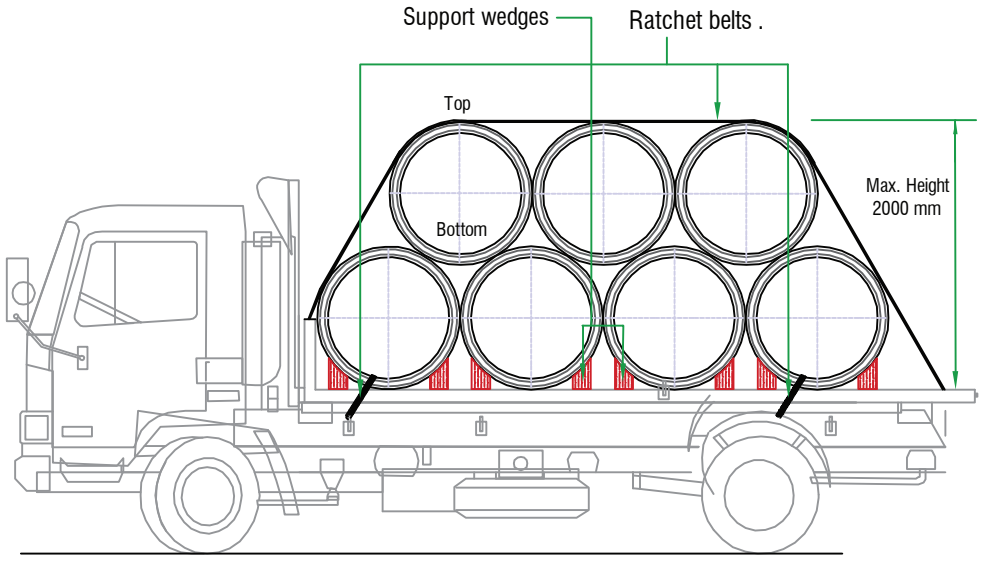


Fig.01 - Correct loading method for transportation.

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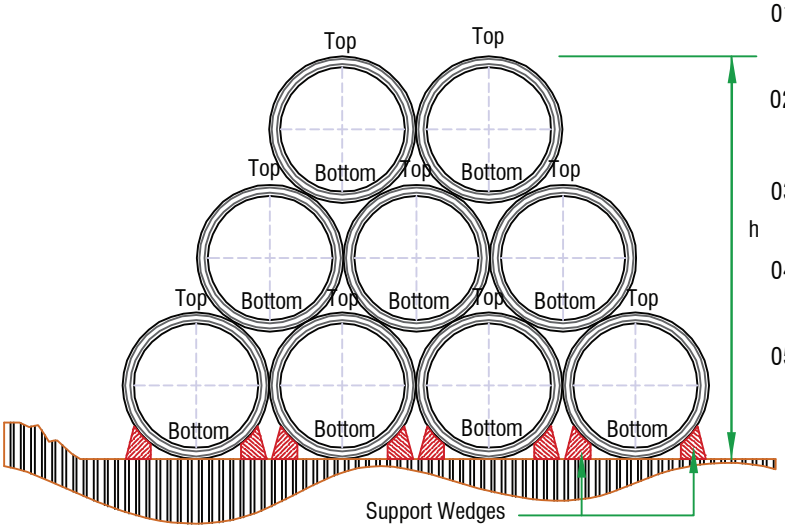

01). During the transportation,stacking,handling & placing of pipes they should be oriented the top and bottom in vertical axis. (fig.01 , fig.02

02). Stacking, should be always on even and firm ground surface.

03). Put the support wedges to both longitudinal side in all bottom pipe Layer to avoid the accident slipping or moving issues.(fig.02)

04). Stacking height "h" should be decided by the site condition with considering the safety.

05). Follow the correct method for pipe handling as per Fig. 03,04 to avoid the damages.

06). Do not standing any workers & officers under the pipe during the handling. always use the guiding rope for handling the product in to the required location. (Fig. 04)

Fig.02 - Corrected method for stacking.

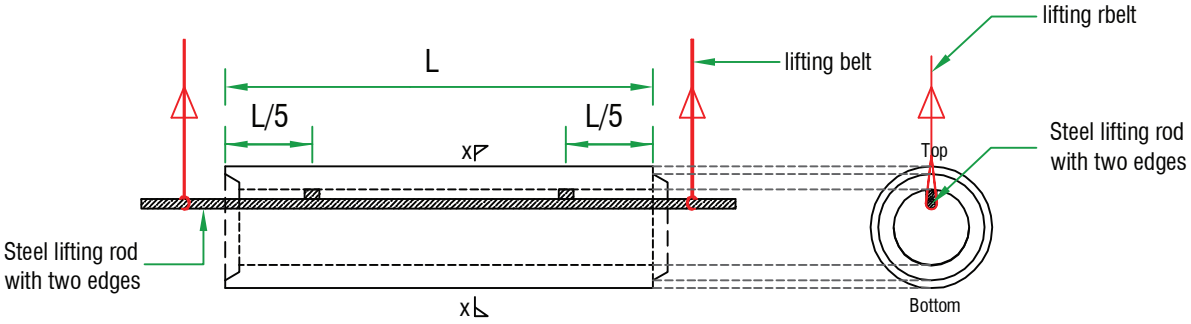

Fig.03 - Correct method for lifting

06. TESTING & INSPECTION

*Material test report and mill report.

*Concrete crushing strength (test cube strength)

*Three edge bearing test (SLS 452 :1979)

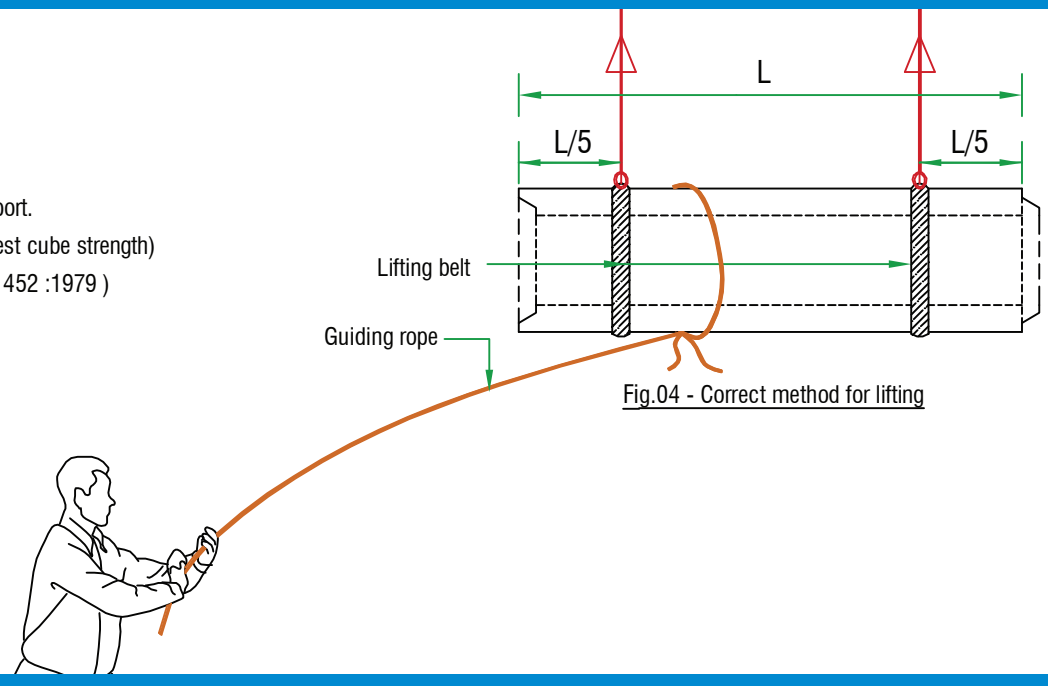

Fig.04 - Correct method for lifting

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