

STRINGER IDENTIFICATION

SKEW ANGLE, RIGHT OR LEFT-DEPTH OF STRINGER IN mm MK. 700 18 / E or I / 30° R/L LENGTH OF STRINGER IN METERS-EXTERIOR OR INTERIOR STRINGER-

DESIGN LOAD:
LIVE LOAD: CL-625 & BCL-625
DEAD LOAD: DESIGNED FOR 100mm CONCRETE OVERLAY.

STRINGERS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE M.O.T. STANDARD SPECIFICATION 415: MANUFACTURE OF PRECAST AND PRESTRESSED CONCRETE MEMBERS.

PRESTRESSING STRANDS SHALL BE 130 (7 WIRE) UNCOATED LOW RELAXATION STRANDS, C.S.A. G279M-1982, 1862 MPa GRADE OR EQUIVALENT. MINIMUM ULTIMATE TENSILE STRENGTH = 184 KN/STRAND. STRAND TENSION IMMEDIATELY BEFORE RELEASE = 136.2 kN/STRAND.

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT TIME OF RELEASE OF STRANDS = 35MPa, AT 28 DAYS = 42MPa.

REINFORCING STEEL SHALL CONFORM TO C.S.A. G30.18M GRADE 400R.
REINFORCING STEEL SHALL HAVE 35mm MINIMUM COVER UNLESS OTHERWISE

NOTED.

ALL REINFORCING MARKED "ME" IS EPOXY COATED.

LAP OF BARS FOR SPLICES TO BE AS FOLLOWS UNLESS NOTED OTHERWISE:

10M BARS - 450

10ME BARS - 600

SPLICES TO BE STAGGERED.

BOTTOM EDGES OF STRINGERS SHALL BE CHAMFERED 20mm.

LIFTING DEVICES SATISFACTIORY TO THE ENGINEER SHALL BE PROVIDED OVER THE BEARINGS. ONLY VERTICAL LIFTS WILL BE PERMITTED. CARE SHALL BE TAKEN TO PREVENT SUDDEN IMPACT LOADS ON THE STRINGERS.

ENDS OF PRESTRESSING STRANDS SHALL BE TREATED AS FOLLOWS:
EMBEDDED IN CONCRETE: PAINTED WITH A GANVANIZING AGENT.
EXPOSED: A MINIMUM 3mm COAT OF THINOTROPIC EPOXY AS SHOWN
MANUFACTURES INSTRUCTIONS TO BE STRICTLY ADHERED TO.

TOP OF BOXES SHALL HAVE A SAND BLASTED FINISH FOR CONCRETE OVERLAY AND FLOAT FINISH FOR NO OVERLAY OR MEMBRANE AND ASPHALT OVERLAY.

THE CONCRETE IMMEDIATELY SURROUNDING ALL LIFTING DEVICES SHALL HAVE A FORMED RECESS 65mm DEEP. THE RECESS SHALL BE THOROUGHLY SANDBLASTED IN THE SHOP. AFTER ERECTION, THE LIFTING DEVICE SHALL BE BURNT OFF AT THE BOTTOM OF THE RECESS AND THE RECESS SHALL BE PATCHED WITH AN APPROVED NON—SHRINK GROUT.

Rev	Date	Description	Init	
С	07-06-28	DESIGN CODE REVISIONS	W.H.K.	
В	93-02-04	GENERAL	J.E.S.	
Α	92-11-12	LIFTING DEVICE RECESS & NOTES	K.L.	

REVISIONS



Ministry of Transportation & Infrastructure Bridge Engineering

STANDARD TWIN CELL CONCRETE BOX STRINGER MK. 700/18/F/30° & MK. 700/18/I/30°

WIIX. 7007 107	L/ 30 & WII	·	00/10/	/ 1/ 50	,
PREPARED UNDER THE DIRECTION OF		DESIG	NED IM	DATE 07-0	7-10
ORIGINAL SIGNED BY B. BARNEWALL		CHEC	KEDRM	DATE 07-0	7-10
		DRAW	N WHK	DATE 07-0	6-28
SENIOR BRIDGE DESIGN AND CONSTRUCTION STANDARDS ENGINEER		SCA	LE AS NOTED		
DATE 93/02/12	NEGATIVE No.				
FILE No.	PROJECT No.	DRAWING	DRAWING No.		
			2978	3-24	IC