

CONCRETE COVER TO REINFORCING STEEL TDC-34

	MINIMUM COVER CAN3-A23.1	COVER FOR FIRE-RESISTANCE RATING			
		1.5h	2h	3h	4h
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	75	75	75	75	75
CONCRETE CAST AGAINST FORMS, BUT EXPOSED TO EARTH OR WEATHER:	40	40	40	40	40
15 BARS, 160 WIRE, AND SMALLER, STIRRUPS, TIES, AND SPIRAL.....					
COLUMN PRINCIPAL REINFORCEMENT.....	50	50	50	65	75
20 TO 55 BARS, AND ALL OTHER BARS.....	50	50	50	50	50
CONCRETE NOT EXPOSED TO WEATHER, OR NOT IN CONTACT WITH GROUND:					
35 BARS AND SMALLER FOR SLABS AND WALLS SEE NOTE #3.....	20	20	25	35	40
FOR JOISTS.....	20	25	25	40	50
BEAM PRINCIPAL REINFORCEMENT.....	40	40	40	40	50
COLUMN PRINCIPAL REINFORCEMENT.....	40	50	50	65	75
STIRRUPS, TIES, SPIRALS, AND ALL OTHER BARS.....	40	40	40	40	40

NOTES:

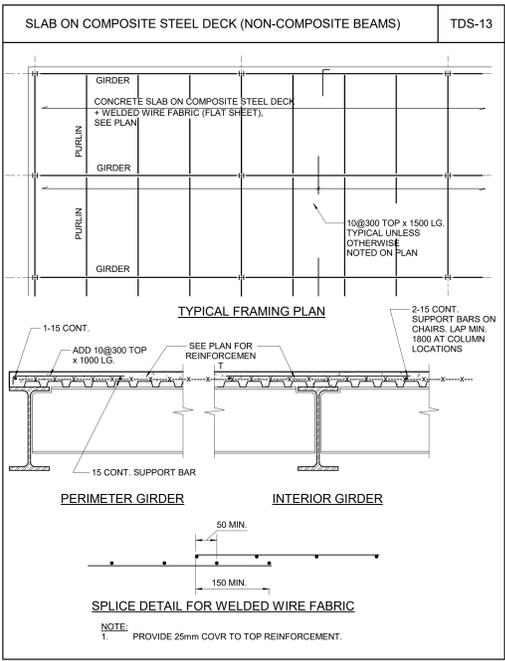
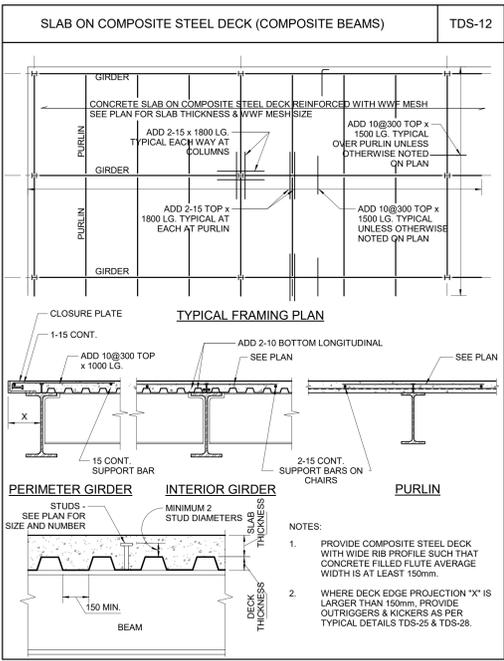
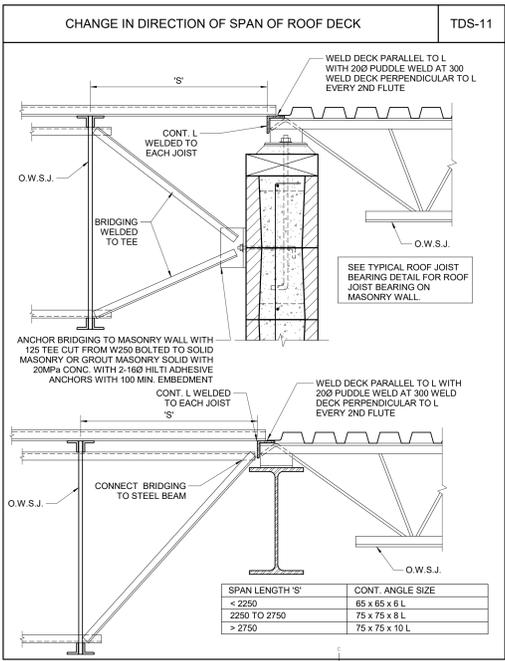
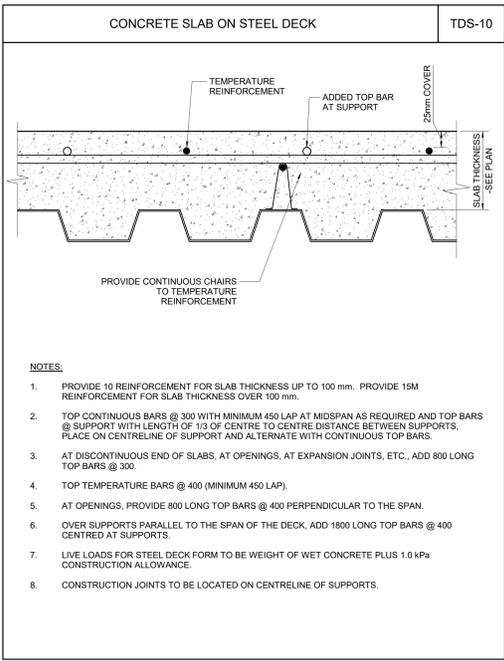
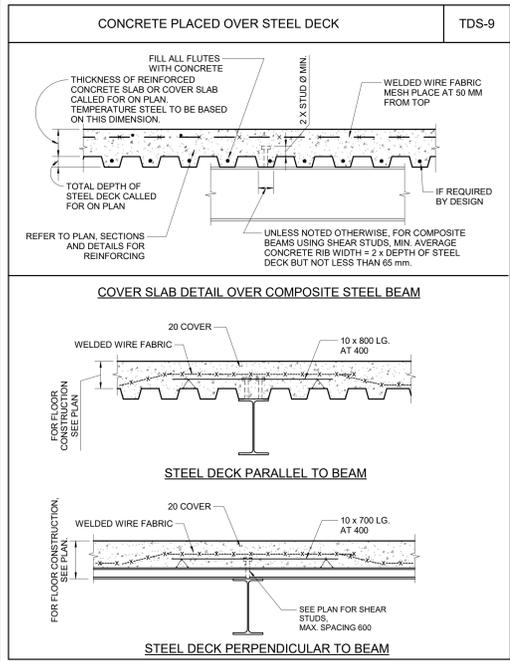
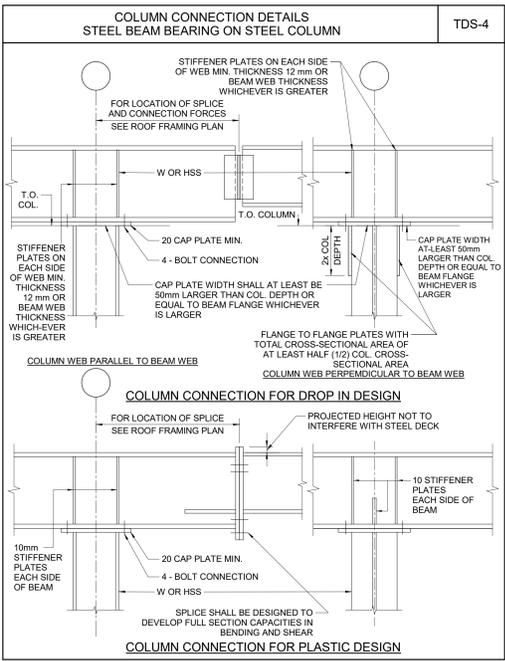
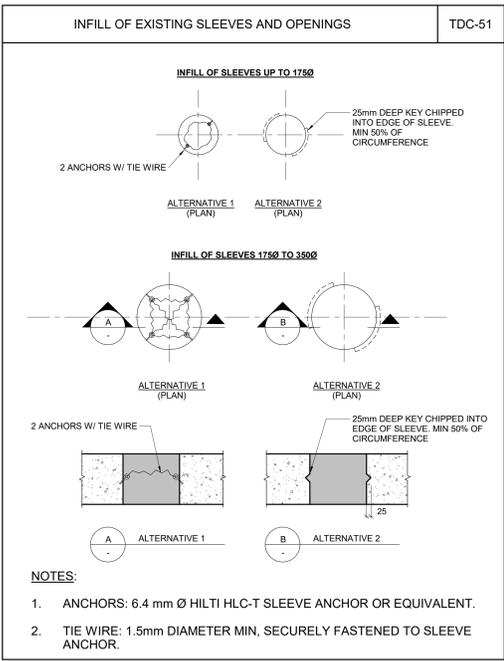
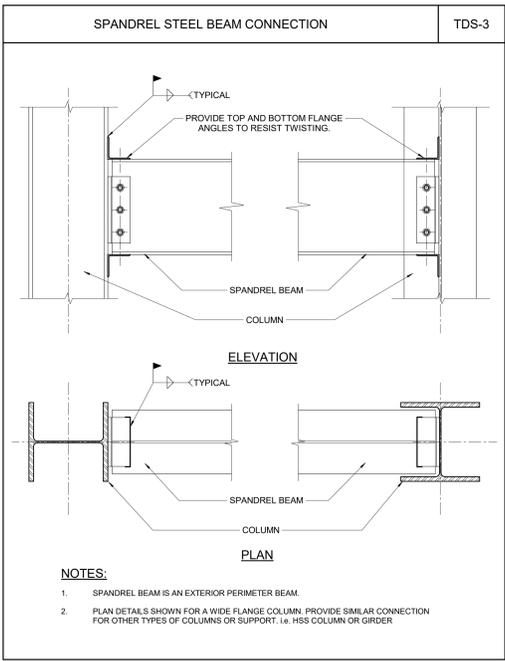
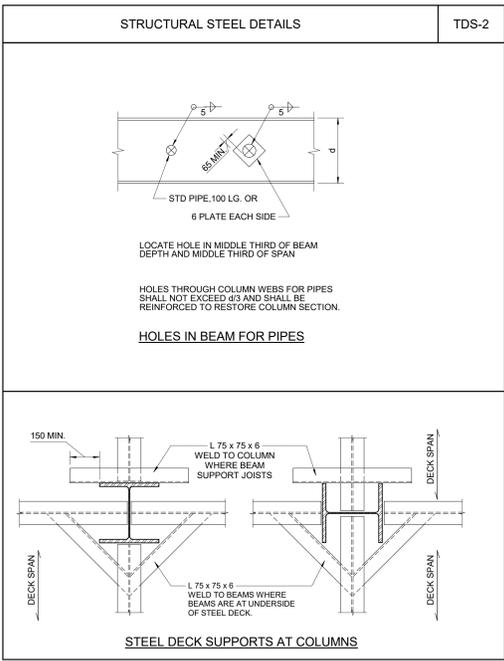
- FOR CAST-IN-PLACE (NON-PRESTRESSED) CONCRETE, PROVIDE MINIMUM CONCRETE COVER TO REINFORCEMENT ACCORDING TO CAN3-A23.1 UNLESS OTHERWISE NOTED ON DRAWINGS.
- WHERE THE FIRE-RESISTANCE RATING OF A COLUMN EXCEEDS 2 HOURS, ADD WELDED WIRE MESH, MINIMUM 102 x 102 - MW3.2 x MW3.2, MIDWAY IN CONCRETE COVER.
- FOR SHORT WALLS WHERE INDICATED ON THE DRAWING, PROVIDE COVER AS FOR COLUMNS.

REINFORCING STEEL BAR AND STANDARD HOOK DIMENSIONS FOR DEFORMED BARS WITH Fy = 400 MPa TDC-39

BAR SIZE	MASS kg/m	DIA. d mm	AREA mm ²	STANDARD HOOK		STIRRUP AND TIE HOOKS (90°)		
				BEND D	90°	D	A	
10M	0.785	11.3	100	70	180	150	40	100
15M	1.57	16.0	200	100	260	180	60	140
20M	2.355	19.5	300	120	340	220	-	-
25M	3.925	25.2	500	150	420	280	-	-
30M	5.495	29.9	700	250	560	400	-	-
35M	7.85	35.7	1000	300	660	480	-	-
45M	11.775	45.7	1500	450	900	-	-	-
55M	19.625	56.4	2500	600	1140	-	-	-

STANDARD 90° HOOK

STANDARD 180° HOOK



NORR
NORR Architects & Engineers Limited
An Ingenium Group Company

175 Bloor St. East
North Tower, 15th Floor
Toronto, ON, Canada M4W 3R8
nor@nor.com

THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF THE PROVINCE OF PRINCE EDWARD ISLAND
VALID FOR THE YEAR 2022

Faisal Jahangir
No. 2558
DATE: 27-05-2022
LICENSED PROFESSIONAL ENGINEER PROVINCE OF PRINCE EDWARD ISLAND

ISSUED FOR TENDER: 2022-05-27

revisions: [table with columns for revision number, date, and description]

project: DANIEL J MACDONALD MODERNIZATION

161 GRAFTON STREET CHARLOTTETOWN, PEI C1A 1L1

TYPICAL DETAILS 01

designed: NORR
date: 2017-06-26
comp: [blank]

Tender: NORR
date: 2017-06-26
designé: [blank]

approved: FJA
date: 2022-05-27
approved: [blank]

Project: Submission
PWGSC Tender Manager / Administrateur de projets TPSC
project number: R.056687.005
no. du projet: [blank]

drawing no.: S02-01
no. du dessin: [blank]

E:\DPM\GDD-E: 553195 v1