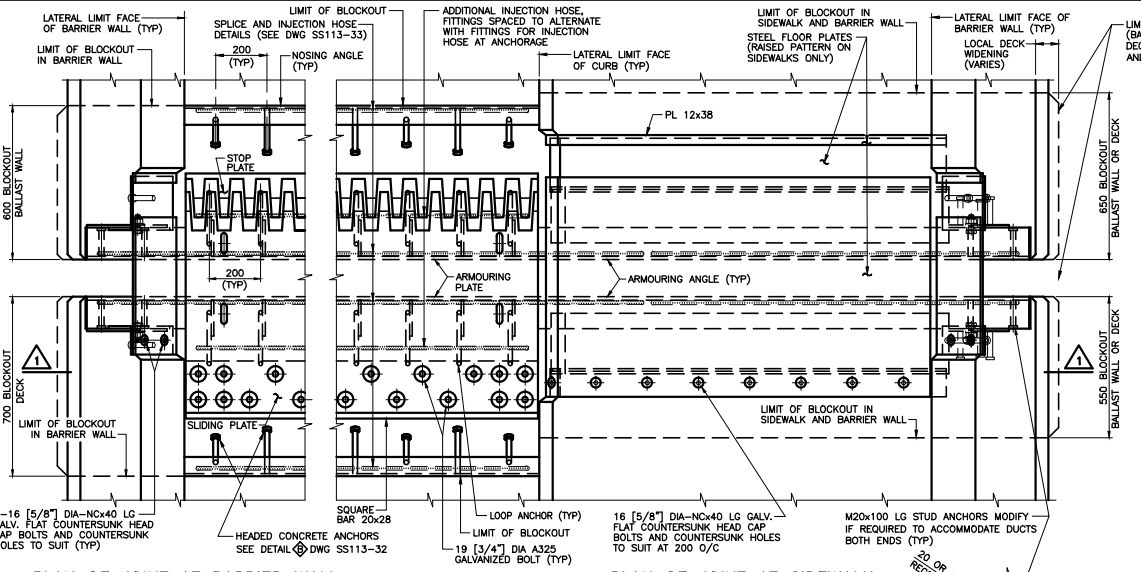


METRIC
 DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN
 DRAWING NOT TO BE SCALED
 100mm ON ORIGINAL DRAWING

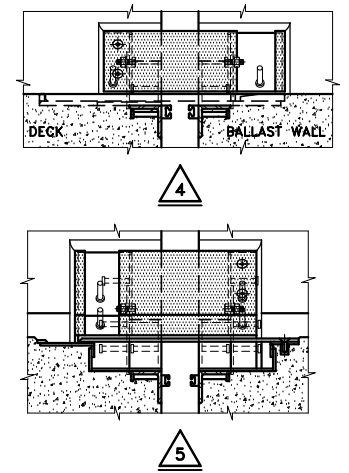
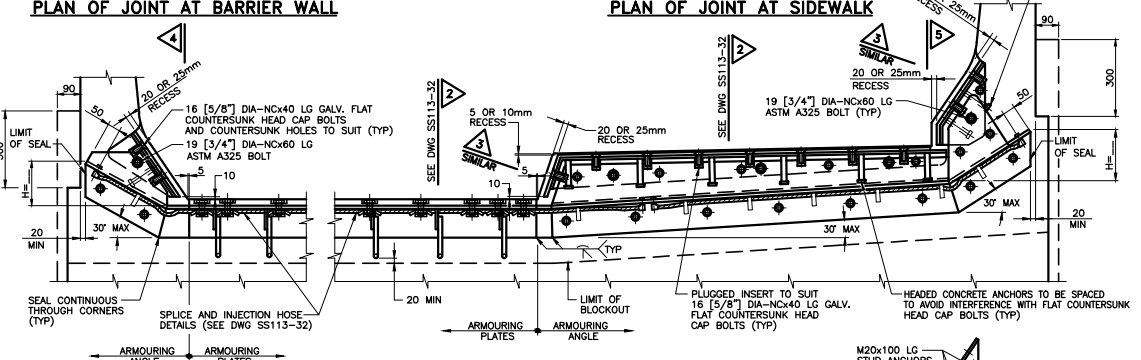


NOTES TO DESIGNER:

- THIS SLIDING PLATE EXPANSION JOINT SHALL BE USED ONLY FOR MOVEMENTS FROM 76mm TO 120mm.
- SLIDING PLATE EXPANSION JOINT SHALL ONLY BE USED AT ABUTMENTS WITH A ROADWAY GRADE NOT GREATER THAN 3%.
- SLIDING PLATE EXPANSION JOINTS SHALL ONLY BE USED AT ABUTMENTS OF POST-TENSIONED BRIDGES, AND AT ABUTMENTS OF ORDER-TYPE BRIDGES WHERE THE DIAPHRAGMS ARE INTEGRAL WITH THE DECK. THEY SHALL NOT BE USED AT PIERS.
- IF DRAINAGE SYSTEM FOR EXPANSION JOINTS IS REQUIRED, THE DESIGNER SHALL USE STANDARD DRAWINGS SS113-31 AND SS113-14, INSTEAD OF THIS STANDARD DRAWING.
- FOR SKEWED BRIDGES, A PLAN AND PROFILE OF THE EXPANSION JOINT(S) SHALL BE DETAILED ON THIS DRAWING SHOWING CROSSFALLS, BREAKPOINTS AND RELEVANT DIMENSIONS.
- WHEN THE SKEW IS GREATER THAN 5°, AND THE REQUIRED HEIGHT OF ARMOURING UPTURN 'H' (SEE NOTE 7) EQUALS 150mm, THE WIDTH OF DECK SHALL BE WIDENED LOCALLY BY 40mm BEYOND THE STANDARD 50mm PROJECTION. THIS LOCAL WIDENING SHALL TYPICALLY EXTEND VERTICALLY TO 300mm ABOVE TOP OF CONCRETE PROJECTION, AND LONGITUDINALLY TO THE LIMITS OF BLOCKOUT IN BARRIER WALL (SEE DASHED LIMITS ON PLAN AND SECTIONS) AND IN SIDEWALK. THIS DETAIL SHALL ALSO BE SHOWN ON THE DECK, BARRIER WALL AND ABUTMENT DRAWINGS.
- REQUIRED HEIGHT OF UPTURN (H):

CROSSFALL SLOPE	DECK WITH CROWN		DECK WITHOUT CROWN	
	WITHOUT SIDEWALK	WITH SIDEWALK	WITHOUT CROWN	WITH CROWN
< 2%	100	100	100	0
> 2%	180	180	180	0
> 0%	100	100	100	100

- WHEN THE CROSSFALL SLOPES AT THE TWO ABUTMENTS ARE NOT IDENTICAL, TWO VALUES OF 'H' SHALL BE GIVEN AT EACH SIDE OF THE DECK.
- THE 'NOTES TO DESIGNER' MAY BE DELETED FROM THIS DRAWING, PRIOR TO ISSUING OF CONTRACT, FUTURE REFERENCE.



- NOTES:**
- EXPANSION JOINT SHALL BE TYPE 'C' AND SUPPLIED BY A MANUFACTURER LISTED IN THE DESIGNATED SOURCES FOR MATERIALS LIST DSM 9.40.27, TYPE 'C'.
 - EXPANSION JOINT ASSEMBLY CONSTRUCTION AND MATERIAL SHALL BE ACCORDING TO OPSS 920 AND OR OPSS 1210, AND AS SPECIFIED IN THE CONTRACT DOCUMENTS.
 - STEEL SHALL BE ACCORDING TO OPSS 1210, EXCEPT THAT GRADE FOR SLIDING PLATE SHALL BE 350W.
 - STEEL PLATE 10mm THICK UNLESS OTHERWISE NOTED.
 - JOINT ASSEMBLIES SHALL BE COMPLETELY SHOP ASSEMBLED (EXCEPT FOR SEALS) AND PRESET TO DIMENSION 'J' FOR 15°C AND ADJUSTED IN THE FIELD TO SUIT INSTALLATION TEMPERATURE.
 - JOINT ASSEMBLY INSTALLATION TEMPERATURE SHALL BE TAKEN AS MEAN SHADE AIR TEMPERATURE AT STRUCTURE PRIOR TO JOINT INSTALLATION AS FOLLOWS:
 - FOR CONCRETE STRUCTURES - 48 HOURS
 - FOR STEEL STRUCTURES - 24 HOURS
 - FIELD SPLICES IN JOINT ASSEMBLY ARE ONLY PERMITTED AT STAGED CONSTRUCTION, AND/OR AS SHOWN ON THE CONTRACT DRAWINGS.
 - IF THE JOINT ARMOURING FOR A SKEWED STRUCTURE IS SPLICED AT A CROWN, THE SPLICE SHALL BE DETAILED PARALLEL TO THE CENTRELINE OF THE TRAFFIC LANE.
 - SETTING CHANNELS SHALL BE FLAME CUT ACCORDING TO OPSS 920, BUT IN NO CASE PRIOR TO CONCRETE REACHING INITIAL SET.
 - AFTER CURING THE CONCRETE HAS BEEN COMPLETED, THE SETTING DEVICES MAY BE REMOVED, THE VOIDS UNDER THE ARMOURING PLATES AND NOSING ANGLES SHALL THEN BE EPOXY INJECTED.
 - PREFORMED SEALS SHALL HAVE MINIMUM THICKNESS OF 5mm OR AS PER DSM.
 - ALL STEEL RETAINER SURFACES COMING IN CONTACT WITH FOR PREFORMED SEAL SHALL BE CLEANED PRIOR TO INSTALLATION OF THE SEAL.
 - PREFORMED SEALS SHALL BE INSTALLED AFTER JOINT ASSEMBLY HAS BEEN CAST IN PLACE, STYROFOAM OR FILLER BETWEEN DECK AND BALLAST WALL REMOVED, AND EXPANSION GAP CLEARED OF ANY DEBRIS.
 - FOR POST-TENSIONED CONCRETE BRIDGES, JOINT ASSEMBLY SHALL NOT BE INSTALLED UNTIL AT LEAST 7 DAYS AFTER COMPLETION OF POST-TENSIONING OPERATIONS.
 - RAISED MEDIANS ON STRUCTURES SHALL BE PROVIDED WITH SLIDING PLATES. PLATE THICKNESS AND ANCHORAGES SHALL CONFORM TO SIDEWALK DETAILS, AND SHALL ACCOMMODATE INSTALLATION OF SEALS.
 - FOR SKEWED STRUCTURE, WORKING DRAWINGS SHALL BE DETAILED TO SUIT GEOMETRY OF STRUCTURE.
 - ALL JOINT ANCHORAGES SHALL BE DETAILED ON WORKING DRAWINGS PERPENDICULAR TO THE EXPANSION JOINT ON BOTH THE DECK SIDE AND THE ABUTMENT SIDE EXCEPT AS FOLLOWS: STRUCTURES SKEWED FROM OVER 15° AND UP TO 45° SHALL HAVE ANCHORAGES DETAILED 30° OFFSET FROM THE PERPENDICULAR TO THE EXPANSION JOINT ON THE DECK SIDE.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWINGS SS113-32 AND SS113-33.

- ADDITIONAL NOTES FOR BOLTS:**
- 19 [3/4"] DIAMETER BOLTS SHALL BE IN ACCORDANCE WITH WITH ASTM A325. ALL BOLTS USED IN 38mm DIAMETER HOLES SHALL BE INSTALLED WITH OVERSIZE WASHERS.
 - 16 [5/8"] DIAMETER COATED FLAT COUNTERSUNK HEAD CAP BOLTS SHALL BE IN ACCORDANCE WITH ASTM F835.
 - ALL BOLTS SHALL BE INSTALLED USING MOLYSDO LUBRICANT.
 - ALL BOLTS SHALL BE TENSIONED USING THE TURN-OF-NUT TIGHTENING METHOD IN ACCORDANCE WITH CSA S6-14.

REFER TO 1.1.8 IN THE STRUCTURAL MANUAL FOR PROFESSIONAL ENGINEER STAMPING REQUIREMENTS.

STANDARD DRAWING
 NOVEMBER 2018
SS113-30
SLIDING PLATE EXPANSION JOINT ASSEMBLY FOR BARRIER WALLS

REVISIONS	DATE	BY	DESCRIPTION
DESIGN	CHK	CODE	CSA S6-14
DRAWN	CHK	SITE	LOAD
			DATE
			DWG