

STEEL METERIALS:

**GENERAL NOTES:** 

STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING QUALITIES:

PRIMARY STRUCTURES

EN 10025-2 S355J2 EN 10025-2 S355N t < 30 30< t < 40

STEEL FOR PRIMARY STRUCTURES TO BE DELIVERED WITH INSPECTION CERTIFICATE 3.1 IN ACCORDANCE WITH SS EN 10204 PLATES TO BE BENT SHALL BE SUITABLE FOR COLD FORMING IN ACCORDANCE WITH OPTION 11 EN 10025-2

HOLLOW PROFILES SHALL BE WELDED AIRTIGHT.

EXECUTION:

CONCEQUENCE CLASS IS CC2

EXCEUTION CLASS IS EXC2 IN ACCORDANCE WITH EN 1090-2

REQUIREMENTS FOR IMPROVED THOUGH THICKNESS PROPERTIES ARE SHOWN ON THE DRAWINGS. THE PLATE DESIGNATION IS THEN AMENDED "Z" OR "ZX" WHERE X IS THE QUALITY CLASS IN ACCORDANCE WITH EN 10164. WHERE IMPROVED THROUGH THICKNESS PROPERTIES ARE INDICATED, THE REQUIRED QUALITY CLASS IS Z25. STEEL SHALL BE IDENTIFIED BY MARKING, STEEL HARD STAMPING SHALL NOT BE PERMITTED (OPTION 10 IN EN 10025-1) STEEL WORKMANSHIP SHALL BE IN ACCORDANCE WITH EN 1993-1 AND EN 1090-2.

WELDED CONNECTIONS:

WELDING SYMBOLS ARE IN ACCORDANCE WITH EN 22553

DIMENSION OF FILLET WELDS ARE GIVEN AS EFFECTIVE THROAT THICKNESS UNLESS OTHERWISE INDICATED ON THE DRAWINGS. WELDS NOT SPECIFIED ON THE DRAWINGS SHALL BE FULL PENETRATION WELDS

WHEN SIZES OF FILLET WELDS ARE NOT INDICATED THE FOLLOWING TABLE SHALL BE USED:

	THICKNESS OF PLATE (THICKER PART)	MINIMUM FILLET WELD THROAT SIZE
	(MM)	(MM)
	T < 15	4
_		
		1
	15< t ≤ 25	6
	25< t ≤ 35	6

## **BOLTED CONNECTIONS:**

BOLTS SHALL BE MADE OUT OF STAINLESS STEEL TYPE EN 1.4529.

WASHERS SHALL BE PLACED UNDER BOLTS AND NUTS. THE SIZE OF THE WASHERS MIGHT BE INCREASED IF A COATING SYSTEM IS APPLIED TO THE BOLTED ITEM IN ORDER TO AVOID ANY DAMAGES TO THE COATING SYSTEM.

HOLES FOR BOLTED CONNETIONS SHALL BE MADE IN A SIZE TO ALLOW CORROSION PROTECTION BY THE COATING SYSTEM ON THE CUT SURFACES OF THE BOLT HOLES.

DIFFERENT MATERIALS SHALL BE ELECTRCALLY INSULATED FROM EACH IN ORDER TO AVOID GALVANIC CORROSION.

BEARING BUSHES MADE OF PTFE SHALL BE INSTALLED IN THE HOLES WHERE STAINLESS STEEL CLEVIS PINS ARE INSTALLED. THE THICKNESS OF THE COATING INSIDE THE HOLES SHALL BE RESPECTED WHEN PURCHASING THE BEARING BUSHES.

ALL BOLTS TO BE PRETENSIONED TO 70 % OF THE ULTIMATE TENSILE STRENGTH

**UHMW-PE COVER PLATE:** 

COVER PLATE MINIMUM THICKNESS 60MM

INSTALLATION AND FIXATION TO STEEL BACKBORD AND CONCRETE QUAY ACCORDING TO SUPPLIERS SPECIFICATION.

SURFACE PROTECTION:

THE FENDER CONSTRUCTION SHALL BE COATED WITH AN APPROVED NORSOK M-501 COATING SYSTEM 7A WITH A TOTAL DRY FILM THICKNESS (DFT) OF MIN. 700 μm AND BE BASED ON GLASS-FLAKE REINFORCED EPOXY OR POLYESTER. THE EXPECTED LIFETIME ACCORDING TO DNVGL-RP-0416 IS ASSUMED TO BE UP TO 20 YEARS IN THE SPLASH ZONE FOR THIS COATING SYSTEM. NORSOK M-501 SHALL BE FOLLOWED WITH REGARDS TO SURFACE PREPARATION AND COATING APPLICATION.

FOR THE REMAINING 5 YEARS A CORROSION ALLOWANCE (CA) OF 1.5 MM ACCORDING TO DNVGL-RP-0416 HAS BEEN CALCULATED AND APPLIED:

 $[CA = V_{CORR} * (T_D - T_C) = 0.3 \text{ MM} / YEAR * (25 YEARS - 20 YEARS) = 1.5 \text{ MM}]$ 

CONCRETE GROUT:

CONCRETE GROUT AS "SIKAGROUT 212" OR SIMILAR

Anbud 122831-01

NOTES:

Dimensions: Dimensions are in millimeters if nothing else is indicated Levels are in meters if nothing else is indicated

Angles are in degrees if nothing else is indicated

All dimensions are based on drawings of the existing structure

**REFERENCES:** 

122831-02 Plan and sections, type 1

Plan and sections, type 2 122831-03 122831-04 Details I

122831-05 Details II

122831-06 Details III

122831-07 Backboard, type 1

Backboard, type 2 122831-08 122831-09 Backboard details



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