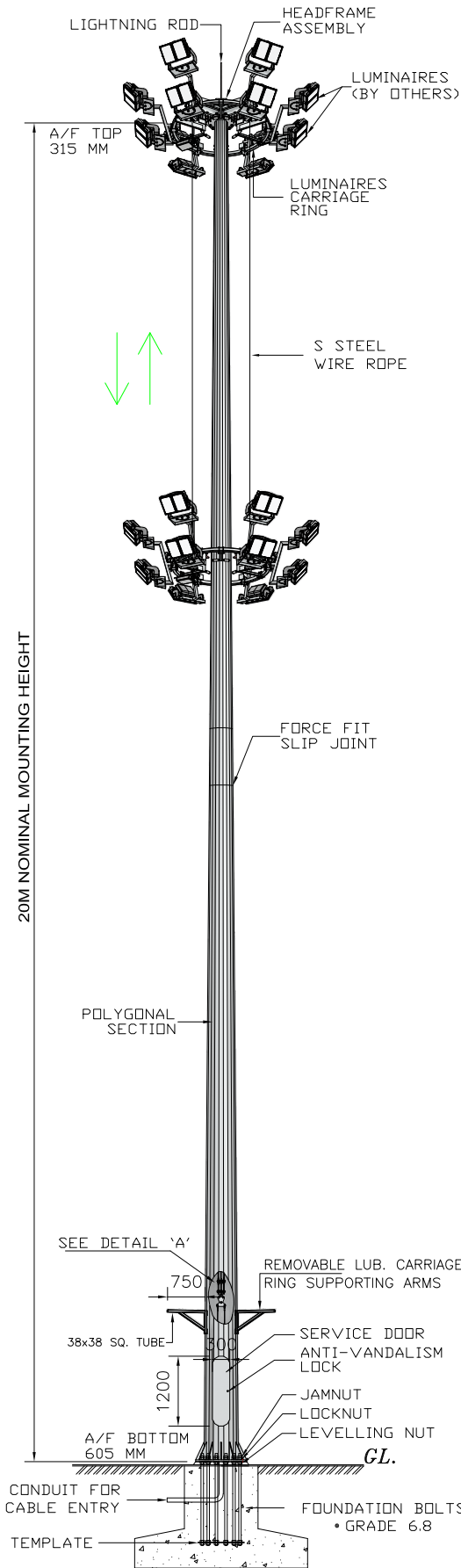
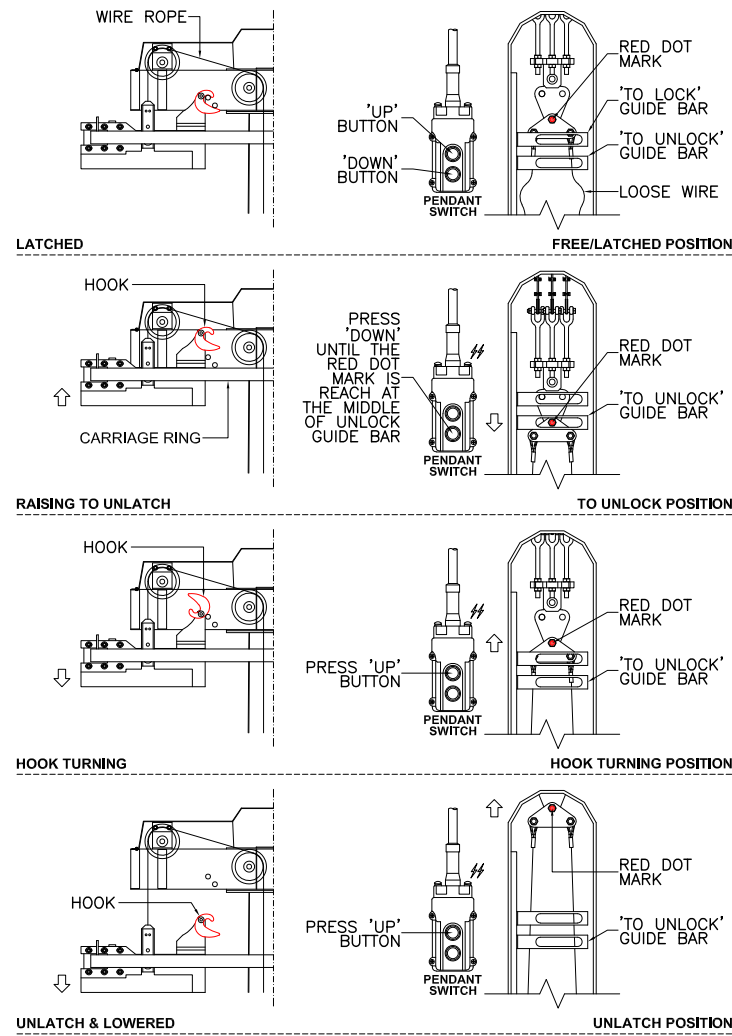


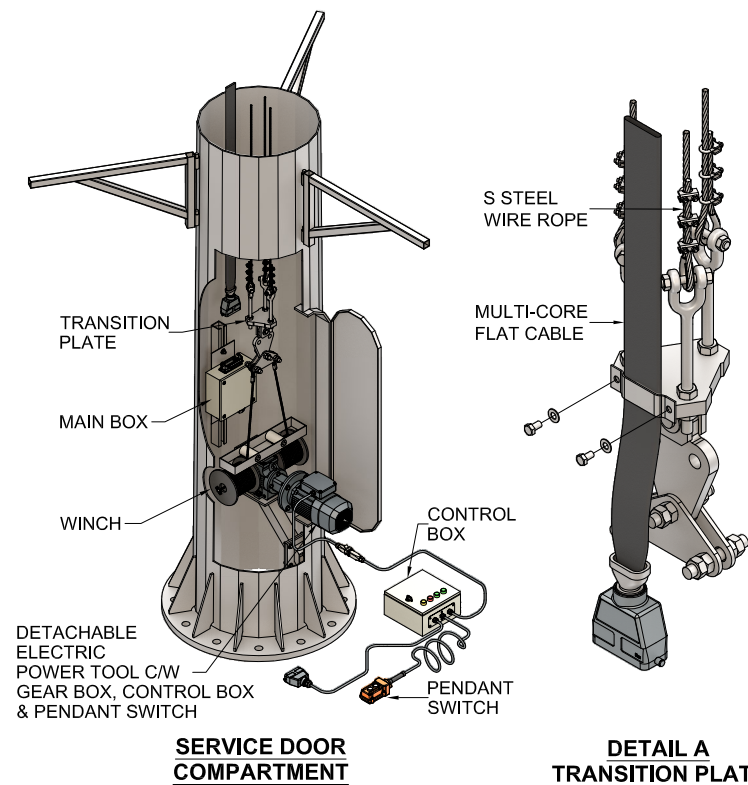
MAX. PROJECTED LUMINAIRE SAIL AREA = 2.5MSQ  
 (BASED ON SYMMETRICAL LUM. ARRANGEMENT)  
 MAX. LUMINAIRE AND BALLAST/COUNTER WEIGHT MASS = 500KGS



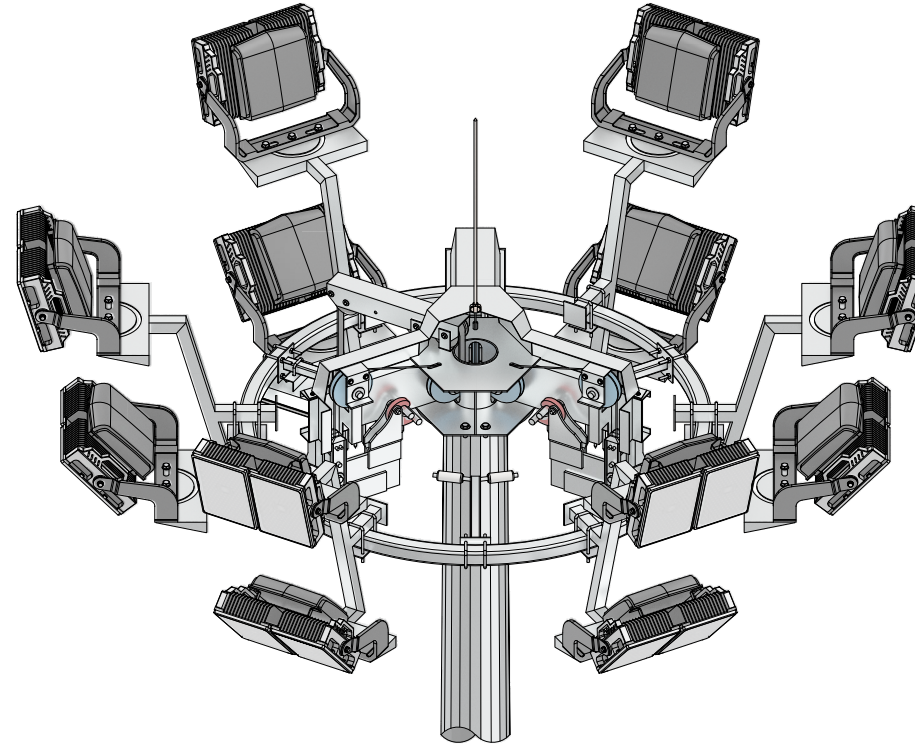
**HEADFRAME**



**HEADFRAME & SERVICE DOOR - TO UNLOCK PROCESS**



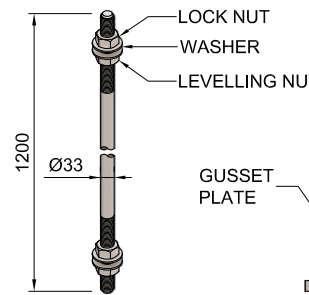
**SERVICE DOOR**



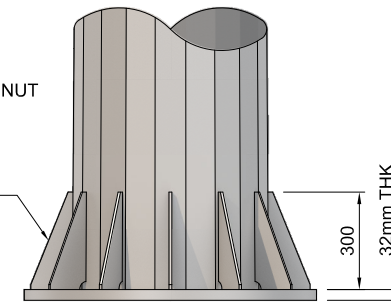
**HIGH MAST HEAD FRAME  
TYPICAL ARRANGEMENT OF LUMINAIRE**

**NOTES :**

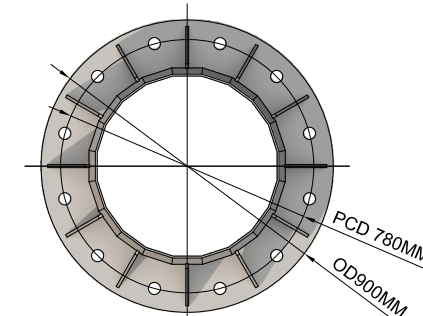
THE LATCHING MECHANISM USES SELF LOCKING SYSTEM FULLY OPERATIONAL BY LAW OF GRAVITY AND MUST NOT CONTAIN MECHANICAL COMPONENTS SUCH AS SPRINGS, LEVERS ETC.



**ANCHOR BOLT**



**BASE FLANGE (FRONT VIEW)  
STIFFENED WITH GUSSET PLATE**



**BASE FLANGE (PLAN VIEW)  
STIFFENED WITH GUSSET PLATE**

**SPECIFICATION**

- 1) HIGH MAST DIMENSION
  - 1.1 MOUNTING HEIGHT = 20M
  - 1.2 CROSS SECTION SHAPE (NO OF SIDES) = 20
  - 1.3 MAX. TOTAL NO OF SECTIONS = 2
  - 1.4 MAX. SECTION LENGTH = 10.8M

	BOTTOM SECTION	TOP SECTION
LENGTH	10500	10800
THICKNESS	6	6
TOP AF		315
BOTTOM AF	605	
- 1.5 SERVICE DOOR DIMENSIONS
  - 1.5.1 LENGTH = 1200mm
  - 1.5.2 WIDTH = 300mm
  - 1.5.3 DOOR BOTTOM FROM GROUND LEVEL = 600mm
- 1.6 DOOR OPENING TO BE REINFORCED HEAVILY TO PREVENT BUCKLING = YES
- 1.7 ANTI-VANDALISM DOOR LOCK = YES-TRIANGULAR DOOR LOCK
- 1.8 BASE FLANGE
  - 1.8.1 OD = 900mm
  - 1.8.2 P.C.D = 780mm
  - 1.8.3 THICKNESS = 32mm
- 2) DESIGN CONDITIONS
  - 2.1 NUMBER OF LUMINAIRE = SUBJECT TO PROJECT
  - 2.2 LUMINAIRE RATING = SUBJECT TO PROJECT
  - 2.3 MAX. PROJECTED LUMINAIRE SAIL AREA (BASED ON SYMMETRICAL LUM. ARRANGEMENT) = 2.5MSQ
  - 2.4 MAX. LUMINAIRE AND BALLAST MASS = 500KGS
  - 2.5 BASIC WIND SPEED = 35 m/s at 10M HEIGHT
  - 2.6 DESIGN SAFETY FACTOR = SUBJECT TO PROJECT
- 3) CONFIRMING STANDARDS
  - 3.1 MAST DESIGN = ILE TR7/ CP3
  - 3.2 MATERIAL = BS 4360 GR50A / JIS G3101 SS400
  - 3.3 WELDING (ELECTRIC ARC WELDING) = BS 5135
  - 3.4 GALVANIZING = BS EN ISO : 1461 (BS 729)
- 4) TESTING PROCEDURES = DIMENSIONAL VERIFICATION GALVANIZING THICKNESS MATERIAL THICKNESS
- 5) ULTIMATE GROUND REACTIONS
  - 5.1 UNFACTORED SHEAR FORCE =
  - 5.2 UNFACTORED OVERTURNING MOMENT =
  - 5.3 UNFACTORED AXIAL LOAD =

REV.	DATE	BY	DESCRIPTION

PROJECT

OWNER

M & E CONSULTANT

MAIN CONTRACTOR

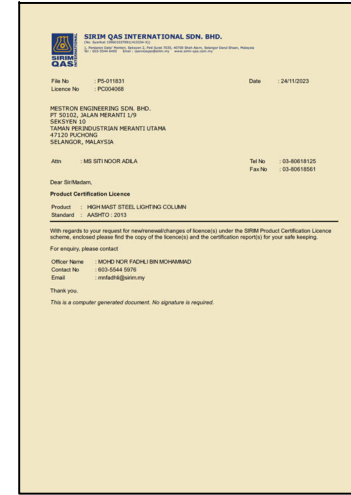
**DRAWING TITLE  
20M HIGH MAST  
STANDARD DESIGN**

MANUFACTURER

**MESTRON ENGINEERING SDN BHD ( 591970-X)**  
 TEL: 603-8069 1815 FAX: 603-8069 1805  
 EMAIL : info@mestron.com.my  
 WEB : www.mestron.com.my



**ISO 9001:2015**



**SIRIM PRODUCT CERTIFICATE**



DRAWN BY : HAFIZ DATE : 31-03-2024

SCALE : N.T.S CHKD. BY : NED

DRAW NO. : 20M-HM-STAND-20-DO-RO REVISION 00