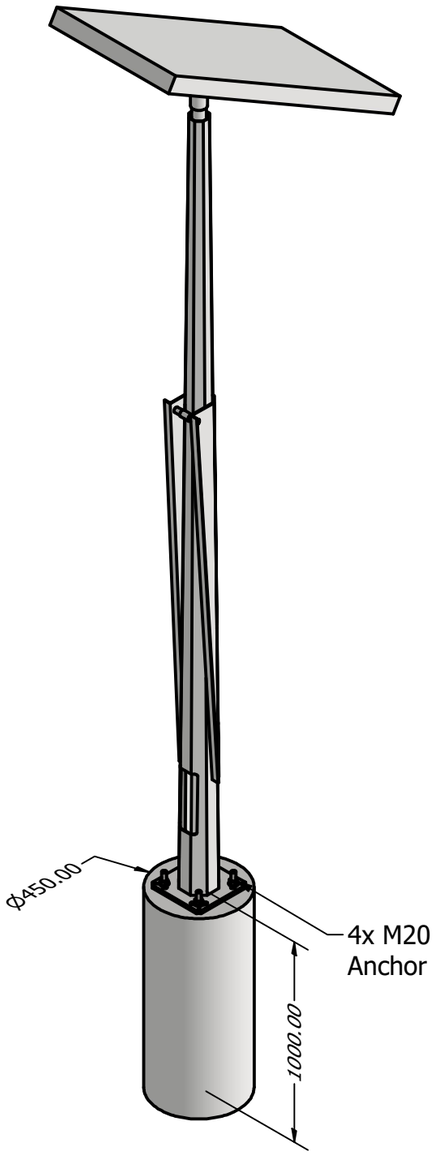
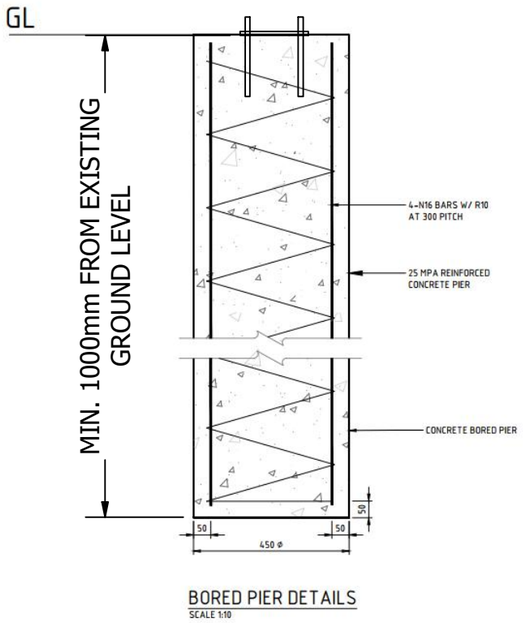
AS 1170.2 - CERTIFICATION FOR 4m HINGED LIGHT POLE

SAFE WIND VELOCITY: 26 m/s

Wind Velocity Region: N2 Region for maximum of 25° Angle of Solar Panel and N1 Region for maximum 30° Angle of Solar Panel

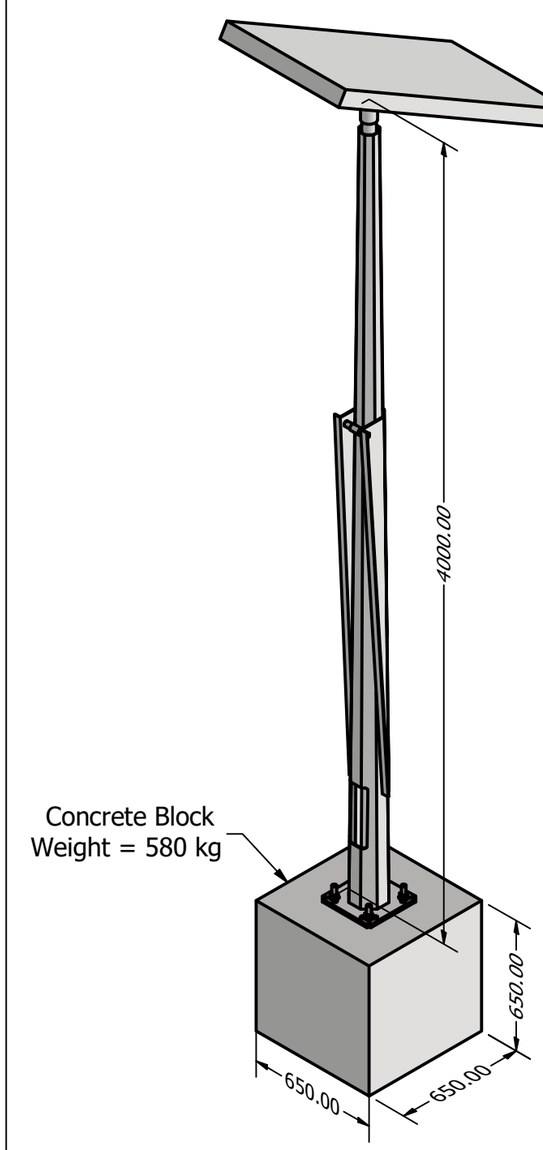




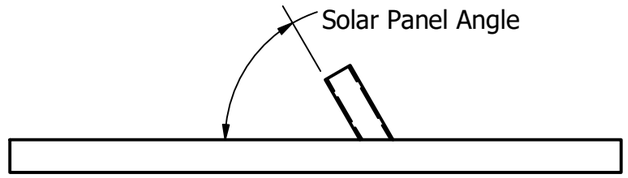
BORED PIER DETAILS
SCALE 1:10

1.The foundation should be founded on soil with a minimum 75 kpa bearing capacity.
2.The bored pier depth is designed based on the uplift and downward force and it is irrespective of the site class.
3.Engineer of design should check and ensure that the founding material is achieved before the installation.

Ground-Mounted Lighting Pole with Foundation (Permanent Solution)



Surface-Mounted Lighting Pole on Ground-Level Concrete Block (Non-Permanent Solution)



SSL-B60MC Solar Panel Representation
Size - 1496mm x 685mm
SCALE 1/15

Safe Wind Speeds for Varying Solar Panel Angles	
Solar Panel Angle	Safe Wind Velocity (kmph)
upto 25°	93.6 (N2 Region)
25° to 30°	93.6 (N1 Region)
30° to 35°	65
35° to 45°	60
45° to 60°	55

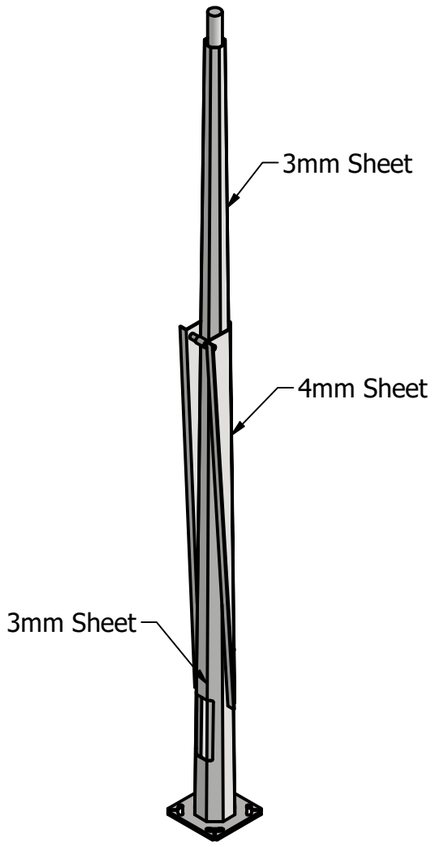
REVISION	DATE	REVISED BY
A	29/08/2024	MD

DRAWN: V.K
APPROVED: N.S.
DESIGNED: V.K
RPEQ No.: 23862
SHEET No.: 32123_1
OWNED BY: RhinoCo TECHNOLOGY
DESCRIPTION: 4m Hinged Light Pole
SHEET TITLE: 4m Hinged Light Pole Wind Rating Certification
CREATED BY: CSA ENGINEERING
www.csaengineering.com.au

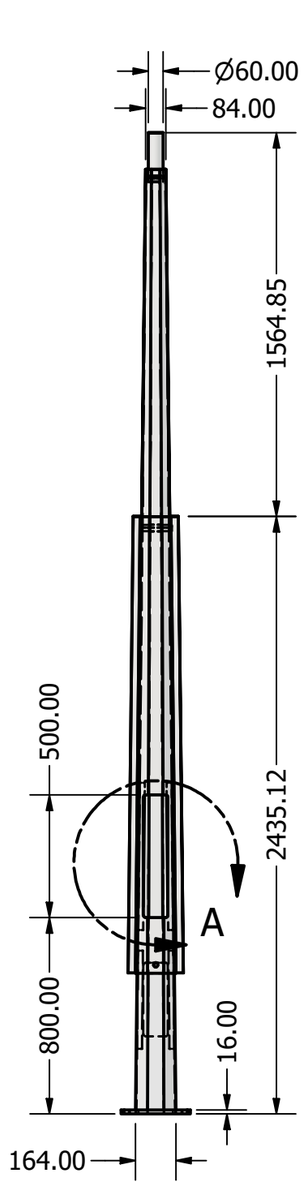
AS 1170.2 - CERTIFICATION FOR 4m HINGED LIGHT POLE

SAFE WIND VELOCITY: 26 m/s

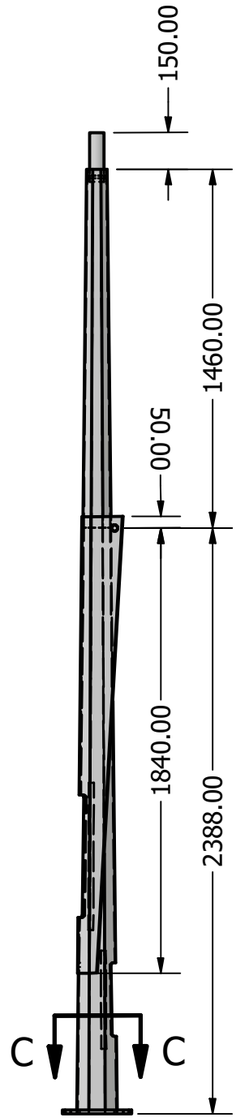
Wind Velocity Region: N2 Region for maximum of 25° Angle of Solar Panel and N1 Region for maximum 30° Angle of Solar Panel



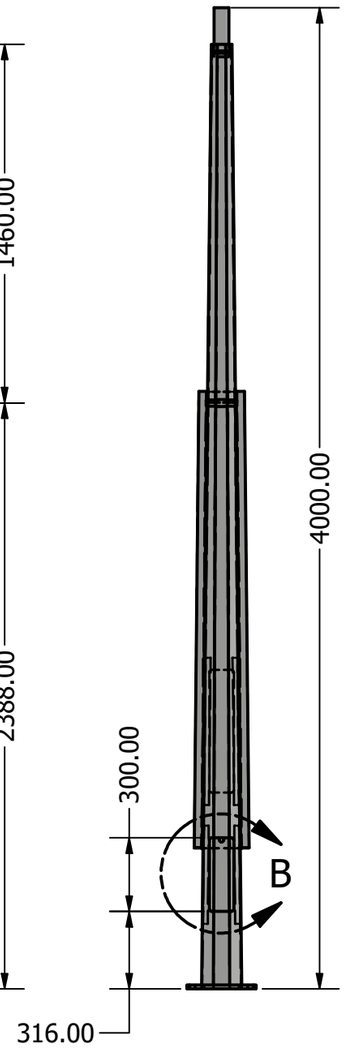
ISOMETRIC VIEW
SCALE 1 / 25



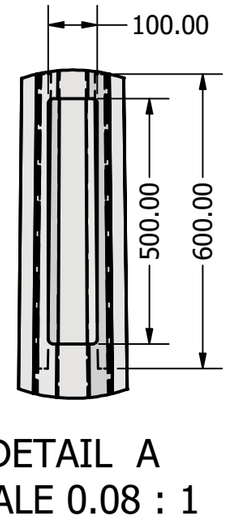
FRONT VIEW
SCALE 1 / 25



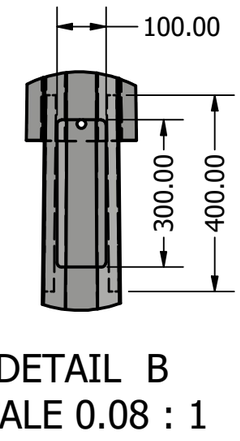
SIDE VIEW
SCALE 1 / 25



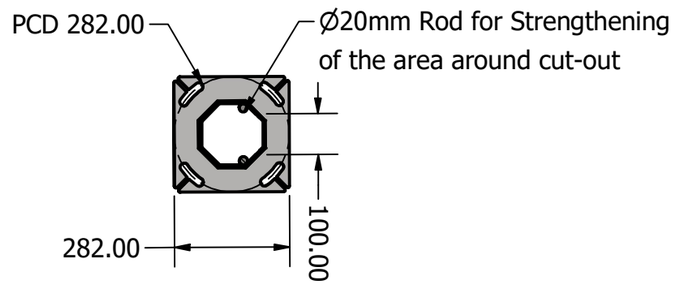
BACK VIEW
SCALE 1 / 25



DETAIL A
SCALE 0.08 : 1



DETAIL B
SCALE 0.08 : 1



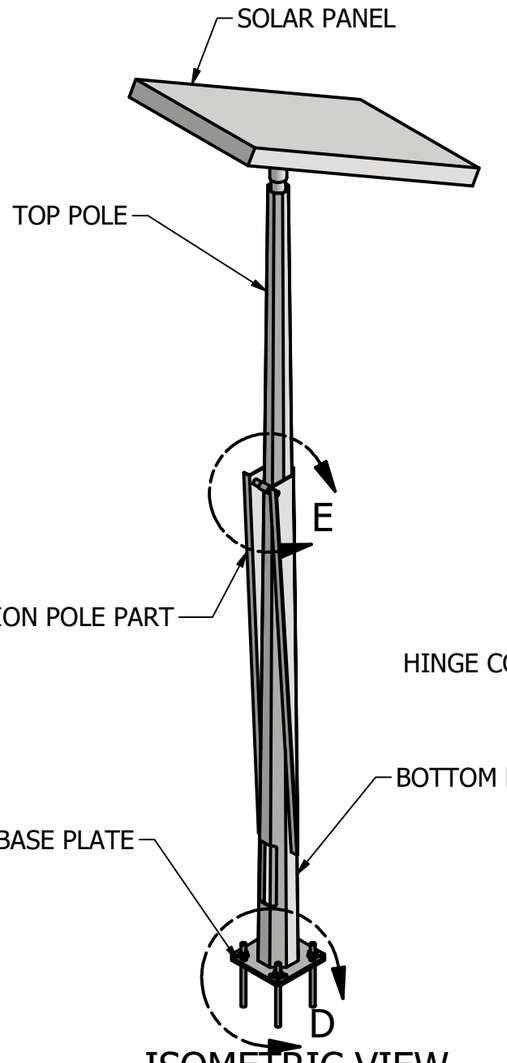
SECTION C-C
SCALE 1 / 15

REVISION	DATE	REVISED BY	DRAWN	APPROVED	OWNED BY	DESCRIPTION	SHEET TITLE	CREATED BY
A	29/08/2024	MD	V.K	N.S.	RhinoCo TECHNOLOGY	4m Hinged Light Pole	4m Hinged Light Pole Wind Rating Certification	CSA ENGINEERING
			DESIGNED: V.K	RPEQ No.: 23862				www.csaengineering.com.au
			SHEET No.: 32123_2					

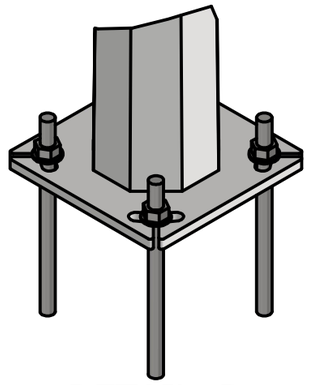
AS 1170.2 - CERTIFICATION FOR 4m HINGED LIGHT POLE

SAFE WIND VELOCITY: 26 m/s

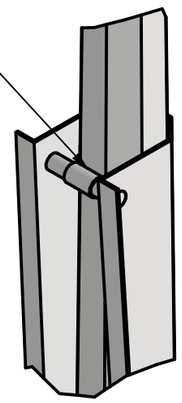
Wind Velocity Region: N2 Region for maximum of 25° Angle of Solar Panel and N1 Region for maximum 30° Angle of Solar Panel



ISOMETRIC VIEW
SCALE 1 / 25



DETAIL D
SCALE 1 / 8



DETAIL E
SCALE 1 / 8

SPECIFICATIONS				
PART NAME	MATERIAL	TOTAL LENGTH	QTY	WEIGHT IN KG/QTY
TOP POLE	Q 355	2390	1	10.9
BOTTOM POLE	Q 355	1460	1	25.36
INTERSECTION POLE PART	Q 355	1890	1	23.39
BPOTTOM PLATE	Q 355	282	1	6.32

SAFETY INSTRUCTIONS:

1. BEFORE INSTALLATION, ASSESS THE SITE FOR ANY POTENTIAL HAZARDS, SUCH AS OVERHEAD POWER LINES, UNSTABLE GROUND, OR NEARBY STRUCTURES. ENSURE THAT THE SITE IS SUITABLE FOR THE POLE'S HEIGHT AND DESIGN.
2. ENSURE THE BASE PLATE IS SECURELY ANCHORED INTO THE FOUNDATION. USE BOLTS AND NUTS SPECIFIED BY THE DESIGN, AND TIGHTEN THEM TO THE RECOMMENDED TORQUE SETTINGS. THE FOUNDATION MUST BE LEVEL AND STABLE TO AVOID TILTING OR UNEVEN STRESS DISTRIBUTION.
3. THE HINGE MECHANISM MUST BE ROBUST AND DESIGNED TO PREVENT FAILURE UNDER THE APPLIED LOADS. IT SHOULD ALLOW SAFE AND EASY LOWERING AND RAISING OF THE POLE WITHOUT EXCESSIVE PLAY OR DEFORMATION.
4. PERSONAL ITEMS AND OTHER EQUIPMENT ARE NOT ALLOWED IN THE FALL ZONE.
5. THE POLE IS DESIGNED TO WITHSTAND A WIND VELOCITY OF UP TO 26 m/s (93.6 km/hr) AS PER AS 4055 AND AS 1170.2 FOR THE N1 AND N2 REGION. DO NOT INSTALL THE POLE IN AREAS WHERE HIGHER WIND SPEEDS ARE EXPECTED UNLESS FURTHER
ANALYSIS AND REINFORCEMENT ARE PERFORMED.
6. SAFETY PRECAUTIONS MUST BE IMPLEMENTED BY THE INSPECTOR FOR SPEEDS EXCEEDING 93.6 km/hr.
7. AFTER RAISING THE POLE, ENSURE THE LOCKING MECHANISM IS SECURELY ENGAGED TO PREVENT THE POLE FROM ACCIDENTALLY LOWERING, ESPECIALLY UNDER WINDY CONDITIONS.
8. PERFORM REGULAR INSPECTIONS OF THE POLE, HINGE MECHANISM, AND BASE PLATE FOR SIGNS OF CORROSION, WEAR, OR DAMAGE. CHECK FOR ANY LOOSE BOLTS OR OTHER COMPONENTS THAT MAY HAVE BEEN AFFECTED BY WIND OR ENVIRONMENTAL CONDITIONS.
9. WHEN THE POLE IS BEING LOWERED OR RAISED, KEEP NON-ESSENTIAL PERSONNEL AND BYSTANDERS OUT OF THE AREA TO PREVENT ACCIDENTS.
10. INSTALL A IDENTIFICATION PLATE ON THE POLE THAT INCLUDES THE MODEL NUMBER, WIND RATING, MANUFACTURER'S DETAILS, INSTALLATION DATE, SIZE, AND ANY OTHER RELEVANT SPECIFICATIONS FOR IDENTIFICATION AND COMPLIANCE.

REVISION	DATE	REVISED BY
A	29/08/2024	MD

DRAWN: V.K
APPROVED: N.S.
DESIGNED: V.K
RPEQ No.: 23862
SHEET No.: 32123_3
OWNED BY: RhinoCo TECHNOLOGY
DESCRIPTION: 4m Hinged Light Pole
SHEET TITLE: 4m Hinged Light Pole Wind Rating Certification
CREATED BY: CSA ENGINEERING
www.csaengineering.com.au