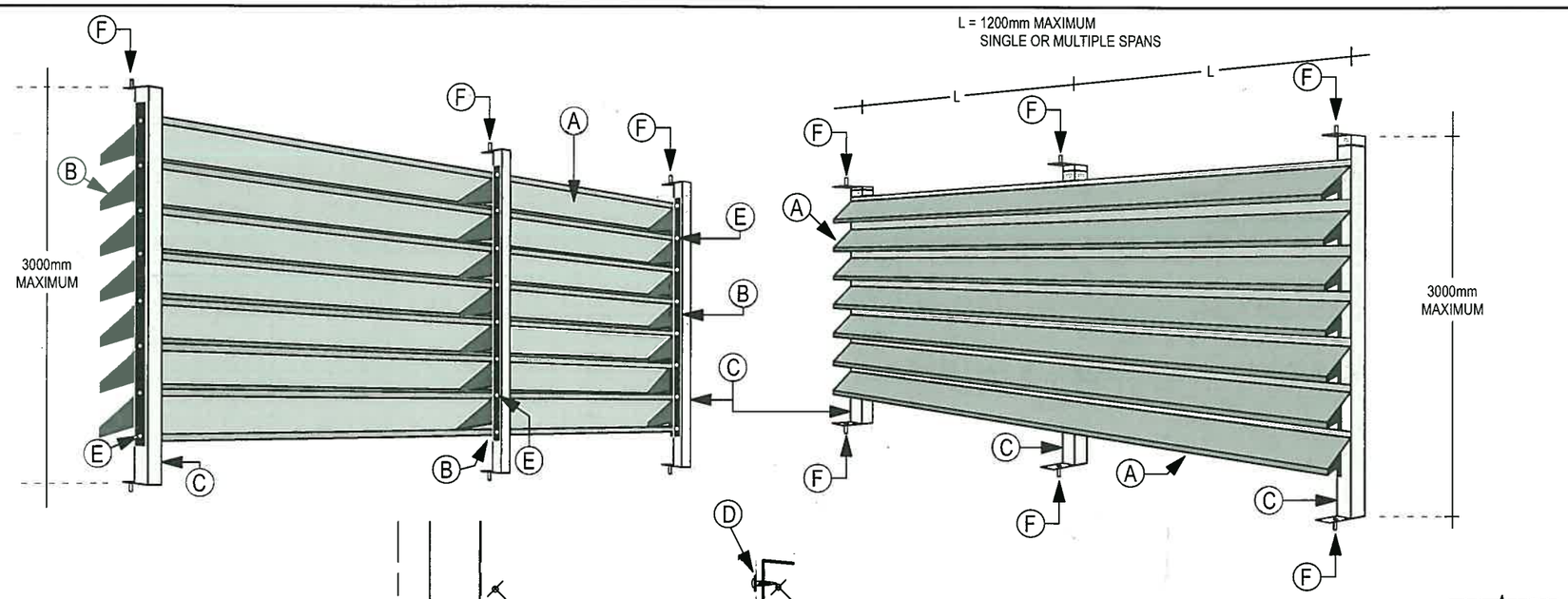
NORTHERN TERRITORY DEEMED TO COMPLY MANUAL – National Construction Code Volume 2 (Section 3.0.4 Structural resistance of materials in high wind areas)

This product has been determined to satisfy NCC Performance Requirement P2.1.1 for structural stability and resistance.



LEGEND for TYPE 1

ALL STRUCTURES STEEL COLUMNS AND BLOCK WALLS ENGINEERED & CERTIFIED BY OTHERS

(A) 0.55 G550 zincalume louvre blades as detailed.

(B) 50x25x1.2mm thick G550 zincalume angle bracket/ mullion.

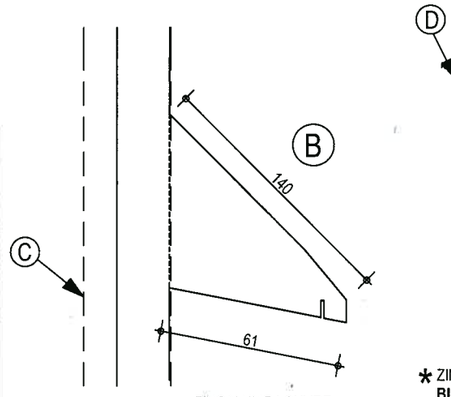
(C) 65x65x4.0 SHS grade C450 (Duragal) posts. Maximum span 3000mm. Protective coatings to BCA 3.4.4.2. Other columns to be engineered by others.

(D) 14g-10 class 4 TEK screws at each blade location into support bracket & SHS frame.

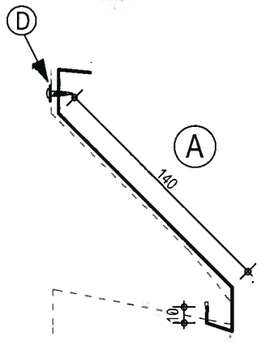
(E) 12g Series 500 class 4 TEK screws @ 400 max. crs. to Columns supplied by others.

(F) Fixing to masonry structures: 75x75x3 base plates with M12 chemical anchor to Manuf's Specs. Min. 100mm edge distance for 15MPa masonry. 75mm for N32 concrete. 110 mm embedment installed in accordance with manufacturers specifications. Maximum shear load 9.5 kN ultimate and 6.3 kN working load. Where posts are less than 3000 long, the resultant shear load may be reduced in proportion.

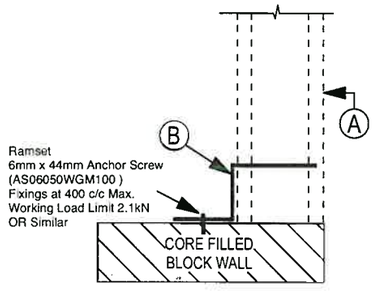
Fixing to steel structures: 3mm continuous fillet weld to all 4 sides to 3mm minimum thickness of steel supports. Weld to AS1554.
Design of structural supports by others. Fixings central to casement & 50mm minimum edge distance. Note: Columns to be fixed at top and btm.



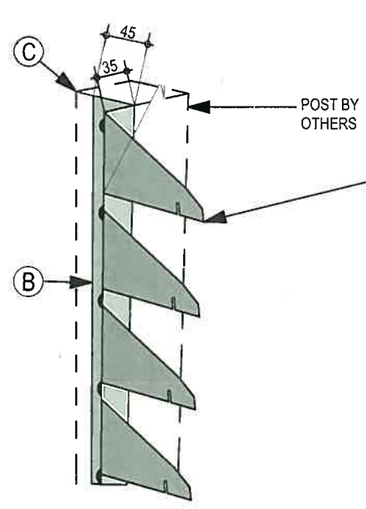
ZINCALUME LOUVRE
SUPPORT BRACKET
1.2mm G550 Zincalume
OR 1.2mm GAL.



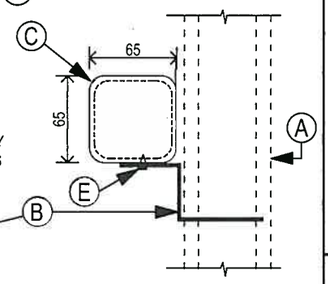
✱ ZINCALUME LOUVRE
BLADE PROFILE
0.55mm G550 Zincalume
Powdercoated any standard colour



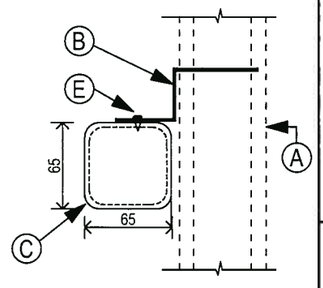
FIXING TO BLOCK WALL



LOUVRES MAY EXTEND TO
FULL HEIGHT OF POSTS



M1 - BRACKET/MULLION TO
MIDDLE POST FIXING DETAIL



ALTERNATIVE
M2 - BRACKET/MULLION TO
MIDDLE POST FIXING DETAIL

Product Name
WEATHERPROOF LOUVRES - TYPE 1

Product Description
1200 WIDE LOUVRE BANK CASEMENT

Manufacturer's Details

DARWIN PROFILE CUTTING PTY LTD

100% Locally Owned & Operated!
PO Box 39252 Winnellie NT 0821 I Australia
8 Pak Street Berrimah Industrial Estate NT 0828
T 08 89 470 566

ABN 26 607 587 459
E sales@profilesnt.com.au

Design Criteria

DESIGN CRITERIA

1. Region C
2. Annual Probability of Exceedance 1 in 500
3. Terrain Category = 2.0
4. Height = 10 metres
5. Regional Wind Speed V_R = 66 m/s
6. Ms = Mt = Md = 1.0 & Mc = 1.05
7. Cpe = +0.7 / -0.65; Cpi = -0.65/ 0.5 kce & kci = 0.9
8. Cshp = ((Cpe x Kl)+ Cpi)x kc = ((0.65x2)+0.5)x 0.9 = 1.62 max

The above design criteria may be varied as appropriate by the design engineer to suit other site applications where the ultimate design wind pressure does not exceed 4.67 kPa

Limitations

The louvre blades are expected to deform under ultimate cyclonic wind loading (V_R. 69.3m/s) but remain secured to the frame. the louvre blades will remain intact under serviceability wind conditions (V_R = 47m/s)

Accepted for inclusion in Deemed to Comply Manual

DTCM drawing number: M/330/01

Chairperson Signature:

Chairperson Name: Paul Nowland

Date of Approval: 28/11/2022 Expiry Date: 28/11/2027

Notes covering basis of DTC (Relevant test reports etc)

1. DESIGN CRITERIA DETERMINED IN ACCORDANCE WITH AS/NZS1170.2:2011 WIND ACTIONS.
2. TEST REPORT J1939-R001B ISSUED BY ROETEK ENGINEERING PTY LTD ON THE 16th FEBRUARY 2012.

Checking Engineer

Name: **John Towler**

Registration Number: **24642ES**

Date: **30.06.2022**

Signature:

Must be an Australian registered structural engineer

Certifying Engineer

Name: **Wisnu Lim**

NT Registration Number: **145651ES**

Date: **30 June 2022**

Signature:

Must be a registered structural engineer in the Northern Territory