

FRANKLIN CONSULTANTS LTD

CONSULTING ENGINEERS

64 Heathcote Rd. Milford Auckland

Tel: 09 410 9355 Fax: 09 410 9353.

Mobile: 021 990 882 email: alanfranklin@ihug.co.nz

NEW MULLION FOR DANPALON CURTAIN WALLS DESIGN SPECIFICATION

PURPOSE:- The new mullion is designed to fix to multi storey buildings with floors at regular intervals generally 3-5 metres apart. Danpalon continuous cladding can then be clipped into the outer face of the mullion providing a continuous flat exterior façade. Internal stiffeners as noted below can be fixed inside the mullion section to enhance performance.

MULLION :- Overall dimensions are 150 deep x 50 wide.
Mullion section as Drawing 5559/1 prepared by R & B Aluminium & dated 7.1.05
Required mullion spacing 1040 mm.
Mullion material 6063 T5 aluminium.
Finish silver anodizing.
Lengths are available for single and double span.
Internal galvanized steel stiffeners:- 75x25x2.5 rhs (rectangular hollow section)
76x38 TFC (tapered flange channel)
The design of the fixing of the stiffener to the mullion to be specific for each project.

FIXING CLEATS:- The calculations show a sample design for anchoring the mullions to an exterior reinforced concrete beam at each floor level. This fixing is designed to carry the dead load of the façade and the wind loads. Each cleat is designed for mullions of 4 000 spans maximum, spacing 1040 centres and wind pressures up to 3.75 KPa ultimate limit state and 2.45 KPa serviceability limit state.
For each project fixing cleats should be specifically designed by an Engineer.

LOADINGS:- Wind pressures at the ultimate limit state (ULS) have been calculated from NZS 4203 1992 and plotted for single span and double span conditions using the unstiffened mullion and the two stiffened mullion variations. The Load Span graphs show the allowable spans in metres for the various ULS wind pressures.

Alan Franklin
BE MIPENZ
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