

Technical Specifications – Maxis™ Joint and Assemblies

MAXIS™ JOINT MATERIAL & FINISH	
Material: Steel - Grade AISI 1045 Investment Cast	Material: Stainless Steel - Grade AISI 316 Investment Cast
Finish: Zinc Aluminum coating (Zn/Al)	Finish: Electrolytic polishing
Compatible with hot-dip galvanised and aluminium products.	

Note: Maxis™ M1 and M2 components form part of lowering light poles which are supplied independent of light fixture. As the final structural loading is dependent on the light fixture fitted and installation location, it is the design responsibility of the specifying engineer to ensure the structural adequacy of the model contained in the final installed light pole assembly, based on the limits of its structural elements provided above.

MANUFACTURING STANDARDS – MAXIS™ ASSEMBLIES	
Steel Structures	AS 4100
Structural Design Actions	AS/NZS 1170
Steel Pipe	AS/NZS 1163 & ASTM A500
Stainless Steel Pipe	ASTM A312 & ASME B36.19
Hot-dip galvanising	ASTM A213 (USA) CSA G164 (Canada) AS/NZS 4680 (Australia)
Aluminum Pipe 6061 T6 or 6082 T6	AS/NZS 1866 (Australia) ASTM B429 (USA & Canada)

DISCLAIMER
The adequacy of the guardrail and supporting structure must be verified by a site approved engineer. Swivelpole Group Pty Ltd and or Exemplar Products Pty Ltd, subsidiaries and related entities (“Swivelpole”) will accept no responsibility for failure due to inadequacy of the supporting structure or guardrail to which the Maxis™ is mounted.

CERTIFICATION & CLASSIFICATION
Maxis™ M1 and M2 models are listed by CSA as Certified under Master Contract number 257018, Certificate of Compliance 2568504, to the following standards:

- CSA Class 3426 02 - CSA C22.2 No.250.00-18 (Canada)
- CSA Class 3426 82 - UL 1598; 4th Edition (US):

Acceptable for installation in Class 1, Division 2, Group A, B, C, and D Hazardous Locations, CSA Document 70216456. Complies with the following standards, to the extent applicable:

- CSA C22.2 No. 213-17/UL12.12.01_9th Edition Requirements for Class I, Division 2 equipment
- C22.1 – 2018 Canadian Electrical Code Part 1; Safety Standard for Electrical Installation

Acceptable for installation in Class II Division 2, Groups E, F and G Hazardous Locations, CSA Document 70216455. Class II Division 2 product available upon request.



DESIGN COMPLIANCE
The Swivelpole™ product range has been developed to meet the design criteria of a range of site conditions, including hurricane winds and hazardous environments.
For additional information on our products and product configurations to suit your design compliance needs, please contact us at sales@swivelpole.com.
Site engineers are responsible for determining the relevant design criteria, including design wind speed and to select the appropriate products from the Swivelpole™ product range to meet this criteria.

Maxis™ M1 and M2 models have been evaluated as structurally adequate by a 3rd party Structural Engineer (Structural Certificate T-18-462, T-19-066 (Stainless Steel)) in accordance with the following relevant publications:

- National Building Code of Canada - Canadian wind-load data
- CSA Standard S6 - Canadian Highway Bridge Design Code
- CSA standard S16 (steel poles)
- AASHTO (American Association of State Highway and Transportation Officials), standard
- LTS (Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals)

The models are suitable for specification in the USA and Canada when loadings have been calculated in accordance with the above standards and design actions as listed in the Structural Certificate referenced above.

WARRANTIES*

5 year limited warranty

1. All equipment and goods are warranted by the seller to be free from defects in material and workmanship for five (5) years from the date of shipment. Normal wear of equipment or goods, equipment or goods which are misused, abused, or damaged, or not used in accordance with the seller’s instructions are excluded in this warranty.
No warranty shall apply or responsibility be taken for any modifications, alterations or additions to the standard product design. This includes exceeding recommended maximum weights for any fittings or exceeding the installed height.
No warranty shall apply on the zinc aluminum or hot-dip galvanized finishes, where the product is exposed to caustic chemical contact or extreme chemical environments.
The adequacy of the High Vibration Pole Top (HVPT) is not guaranteed/ warranted for specific site suitability due to the vibration frequency variances in site and structure conditions. We can guarantee that the HVPT will improve performance and extend design life when compared to an ordinary pole exposed to the same vibrations. Swivelpole Group Pty Ltd and or Exemplar Products Pty Ltd, subsidiaries and related entities (“Swivelpole”) will accept no responsibility or liability, direct or consequential, for failure of this product.

2. Equipment or goods not manufactured by the seller but supplied through the seller shall carry the warranty of the original manufacturer.
The seller’s sole liability under this warranty shall be limited to either replacing or repairing without charge, at its factory or elsewhere at its discretion, any equipment or goods not meeting this warranty, or at seller’s option, refunding the purchase price. The seller shall in no event be liable for any other direct or any special indirect or consequential damages of any kind under this contract or otherwise.
* Subject to change without notice.

BENDING MOMENT CAPACITY

The following summarises the capacity of pole tops tested with the Maxis™ joint assembly and the load exceeded in testing. The tabulated capacities represent the loading in which testing was terminated and the joint remained functional.

Maxis™ Model	Max Top Pole Size (GR350 Carbon Steel / GR205 Stainless Steel)	Joint capacity exceeded in testing (kNm)	
		Carbon steel	Stainless steel
M1	DN32 (42.4x4.9)	3.11	1.64
M1	DN40 (48.3x3.67)	3.11	1.64
M2	DN50 (60.3x5.54)	5.23	2.76

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