

# DESIGN DATA

# SPEED DECK (mark III)

## SPAN DESIGN DATA

## GENERAL NOTES

**INTRODUCTION** The span design data information listed hereunder has been compiled from tests carried out in accordance with:—

AS 1562 — 1973  
Design and Installation of Self-Supporting  
Metal Roofing without transverse laps.

Span Recommendation Graphs (refer Drawing Nos M-108-15) indicate **ULTIMATE LOAD TESTS** for reference information only — The **SAFE WORKING LOADS** are clearly indicated for 'quick reference' span design purposes.

**TESTING AUTHORITY**

Technisearch Limited, Melbourne, Victoria.

**TEST DATA**

1. **Resistance to Concentrated Forces and Resistance to Wind Forces.**  
(Complying with AS 1562 — 1973)

Refer Test Report No. — 5-542A) covering 5-542D) covering  
5-542B) 0.77 mm and 5-542E) 0.62 mm  
5-542C) 5-542F)

2. **Fatigue Test Reports**

Fatigue test reports carried out to comply with CLAUSE 39.7(C)—

**N.T. BUILDING MANUAL**

whereby the fixings and the sheeting shall be proof tested to ensure they will not fail upon the application of 10,000 cycles of working load from zero to maximum at a rate of three Hertz, followed by a static load test of 1.8 times the working load

Test Report dated 25th MARCH 1975

and

covering — 0.77 mm

Test Report dated 21ST SEPTEMBER 1976

covering — 0.62 mm

**DESIGN PARAMETERS**

to comply with Darwin Area Building Manual (May Ed. 1975)

The **MAXIMUM ALLOWABLE SPANS** — set out on TABLES 1 and 2 on SHEET NO M-109-3 have been based on the following:—

- i Mean return period of 50 years.
- ii Basic Design Wind Velocity of 55 m/s (meters per second)
- iii Cyclonic Area multiplier of 1.15
- iv Terrain and height Categories — covering relevant velocity multipliers of not less than 0.73 and building heights of up to 5 and 10 metres.
- v **Pressure Drag and Force Coefficients**

The Coefficients selected shall be deemed to be extremes of wind loadings on the wall and roof surfaces of structures covering both External Suction at -0.9 and Internal Pressure of +0.8.

**RECOMMENDED FASTENERS FOR CLIP FIXING**

Speed Deck (Mark III) Fixing Clips shall be fixed with **2 fastenings per each clip** through the holes provided (Refer to "Product Identification" Drawing No. M-109-1)

(a) **FIXING TO LIGHT GAUGE STEEL UP TO 4.5mm THICK**

Use a "DEUTSHER TEK" — Self Drill — Self Tapping Screw.

SCREW SIZE — No. 10  
THREADS PER INCH — 24  
SCREW LENGTH — 16 mm  
HEAD STYLE — WAFER — CROSS RECESS

{ (Recommended minimum material thickness 1.55mm).  
Refer Technisearch reports No. HS 77-2 Dated 16/2/77 and No. HS 77-3 dated 18/2/77

(b) **FIXING TO STEEL OVER 4.5mm**

Use a "DEUTSHER TYPE 23" — Thread Cutting Screw  
SCREW SIZE — No. 10  
THREADS PER INCH — 24  
SCREW LENGTH — 16mm  
HEAD STYLE — WAFER — CROSS RECESS  
DRILL SIZE — 4.2mm or 5/32"

(c) **FIXING TO TIMBER** of Group Strengths up to S5

Use a "DEUTSHER TYPE 17" — Self Drilling Wood Screw  
SCREW SIZE — No. 10  
THREADS PER INCH — 12  
SCREW LENGTH — 25mm  
HEAD STYLE — WAFER — CROSS RECESS

{ 4 Fastenings per clip to be used at all times when fixing to timber

MANUF'S NAME <b>Stramit Industries Limited</b>		FIXING OF ..... <b>STRAMIT "SPEED DECK" ROOFING</b> .....	
ADDRESS <b>96 Franklin Street Melbourne 3000</b>		IN THE DARWIN AREA	
PHONE No <b>329 7611</b>		<b>DESIGN DATA SHEET</b>	
CERTIFIED <i>[Signature]</i> M I E AUST		NORTHERN TERRITORY CYCLONIC AREAS	DRAWING No. <b>M/109/2</b>
DATE <b>20/2/1977</b>		Acptd. <i>[Signature]</i>	Date <b>4/6/78</b>