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## Test Report

Our Ref: WKL/RKP Number 45018 Issue 1 Date 21/05/2004 Page 1 of 4

A/C No: M114

Tested For:-

T I MIDWOOD & COMPANY LIMITED  
 Green Lane  
 Wardle  
 Nantwich  
 Cheshire  
 CW5 6BJ

**QUALITY TESTING OF TIMCO ROOFING SCREWS**  
**SHEAR, TORQUE, BEND AND PULL OUT VALUES ON VARIOUS SIZES**

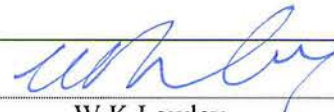
**RELEVANT INFORMATION**

**Description**

1: L or L with Washer	Light section self- drilling screws with self tapping thread	3mm Test Plate
2: H or H with Washer	Heavy section self – drilling screws with metric thread torque relieving slot and flutes	12.5mm Test Plate
3: LH	Light section high thread self-drilling screws with self tapping thread	3mm Test Plate
4: HH	Heavy section high thread self-drilling screws with metric thread and torque relieving slot	12.5mm Test Plate
5: DS	Light section double slash point with self tapping thread for timber	Hardwood Test Block
6: S or S with Washer	Light section self- drilling secondary screws (stitching screw)	2 x 1mm Test Plates
7: LW	Light section wing tip self-drilling screws washer faced countersunk head with ribs and self tapping thread	3mm Test Plate
8: HW	Heavy section wing tip self-drilling screws washer faced countersunk head with ribs and metric thread	12mm Test Plate
9: BW	Light section wing tip batten fixing self-drilling screws countersunk head with ribs and self tapping thread	3mm Test Plate

Submitted By: Peter Owen  
 Purchase Order No: 3302  
 Date Tested: 20/05/2004

REPORT COMPILED BY



W K Lawley  
 Senior Mech. Test Eng.

REPORT APPROVED BY



R K Pratt  
 Group Leader Mech. Testing

**RESULTS**

<b>1: LIGHT SECTION SELF DRILLING SCREWS WITH SELF TAPPING THREAD</b>		
Pull Out Load Test	8.56Kn	The screw was forced out of the test plate
Torsional Load Test	12.0Nm	
Shear Load Test	11.60kN	
Bend Test	Bent through 15° <u>without</u> fracture	

<b>2: HEAVY SECTION SELF DRILLING SCREWS WITH METRIC THREAD AND TORQUE RELIEVING SLOT &amp; FLUTES</b>		
Pull Out Load Test	17.78kN	The screw fractured approximately 10mm from the underside of the head
Torsional Load Test	14Nm	
Shear Load Test	12.84kN	
Bend Test	Bent through 15° <u>without</u> fracture	

<b>3: LIGHT SECTION HIGH THREAD SELF DRILLING SCREWS WITH SELF TAPPING THREAD</b>		
Pull Out Load Test	8.59kN	The screw was forced out of the test plate
Torsional Load Test	14.5Nm	
Shear Load Test	13.25kN	
Bend Test	Bent through 15° <u>without</u> fracture	

<b>4: HEAVY SECTION HIGH THREAD SELF DRILLING SCREWS WITH METRIC THREAD AND TORQUE RELIEVING SLOT</b>		
Pull Out Load Test	19.15kN	The screw fractured approximately 50mm from the underside of the head
Torsional Load Test	15Nm	
Shear Load Test	12.64kN	
Bend Test	Bent through 15° <u>without</u> fracture	

<b>5: LIGHT SECTION SELF PIERCING SCREWS WITH SELF TAPPING THREAD FOR TIMBER</b>		
Pull Out Load Test	5.23kN	The screw was forced out of the timber test block
Torsional Load Test	9.0Nm	
Shear Load Test	10.18kN	
Bend Test	Bent through 15° <u>without</u> fracture	

<b>6: LIGHT SECTION SELF DRILLING SECONDARY SCREWS. (STITCHING SCREW)</b>		
Pull Out Load Test	4.050kN	The screw was forced out of the test plate
Torsional Load Test	20.0Nm	
Shear Load Test	15.5kN	
Bend Test	Bent through 15° <u>without</u> fracture	

<b>7: LIGHT SECTION WING TIP SELF DRILLING WASHER FACED COUNTERSUNK HEAD SCREWS WITH RIBS AND SELF TAPPING THREADS</b>		
Pull Out Load Test	8.69kN	The screw was forced out of the test plate
Torsional Load Test	12.5Nm	
Shear Load Test	12.5kN	
Bend Test	Bent through 15° <u>without</u> fracture	

<b>8: HEAVY SECTION WING TIP SELF DRILLING WASHER FACED COUNTERSUNK HEAD SCREWS WITH RIBS &amp; METRIC THREAD</b>		
Pull Out Load Test	15.83kN	The screw fractured at the head / shank junction
Torsional Load Test	12.50Nm	
Shear Load Test	12.86kN	
Bend Test	Bent through 15° <u>without</u> fracture	

<b>9: LIGHT SECTION WING TIP BATTEN FIXING SELF DRILLING COUNTERSUNK HEAD SCREWS WITH RIBS &amp; COARSE SELF TAPPING THREAD</b>		
Pull Out Load Test	7.21kN	The screw was forced out of the test plate
Torsional Load Test	8.0Nm	
Shear Load Test	9.42kN	
Bend Test	Bent through 15° <u>without</u> fracture	

**End of Report**