Raised Access Flooring (Accsys)

Contents

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winvic
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Scope of Works

winvic

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1 INTRODUCTION & SCOPE OF WORKS

1.1 Installation Contractor

Works Package:	Raised Access Floors
Contractor Name:	Accsys Projects Ltd
Contractor Address:	Unit 11 Insight Park, Welsh Road East. Southam, Warwickshire, CV47 1NE
Tel Number:	01926 633 355
Web Address:	www.accsysprojects.co.uk
Contact:	John Deely – Contracts Director
Email:	info@accsysprojects.co.uk

1.2 Installation Description

First & Second Floors

Supply and install Kingspan RMG600 medium Grade raised floor installed onto Alpha pedestals adhesive fixed the subfloor to form a nominal 200mm finished floor height, using the Kingspan "simploc" method of screw fixing the raised floor panels to pedestal understructure. Form square edge holes for outlet boxes. Application of one coat of Acseal PVA tinted sealer to all concrete surfaces within the floor void.

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1.3 Completion Date

June 2022

Certificates/Warranties/Guarantees

winvic.co.uk

8 WARRANTIES / GUARANTEES

The stated flooring manufacturer provides the following warranty terms in relation to the raised access floor installation undertaken on the above referenced project (administered by Accsys Projects Ltd):

a.)	New Floor panels	25 years from installation date
b.)	New Pedestal understructure	25 years from installation date
c.)	Installation/Workmanship	1 year from installation date

The effective start date for this warranty is: June 2022

Cover

The installation is warranted against poor workmanship in the production and manufacture of the products and final site installation works. This includes (where installed), Floor panels, Pedestal understructure, structural stringers, adhesives and fastenings, fittings, bridging units and bracings, and any associated ancillary installation items supplied by Accsys Projects Ltd.

Any new floor system components (a. & b.) are guaranteed directly by the flooring manufacturing company against defective materials for a period of 25 years starting from the installation completion date if properly maintained and used in accordance PSA (MOB PF2 PS/SPU) performance specification, see attached confirmation letter.

This guarantee is only valid for the new products installed by Accsys Projects Ltd and does not cover any of the customers other existing flooring installations or existing components not replaced as part of our works.

Accsys Projects Ltd warrants that the Goods will be of satisfactory quality (within the meaning of the Sale of Goods Act 1979) at the time of delivery and the Company shall at its option refund the purchase price at the pro rata contract rate or repair or replace free of charge any Goods which are defective provided.

Insurances

Accsys Projects Ltd commits to maintaining the following levels of insurance cover, so long as the company is trading:

Employers Liability	£10m
Public Liability	£10m
Products Liability	£10m
Professional Indemnity	£5m

Exclusions

The following exclusions apply to the Guarantee:

- any defect that has arisen because the Customer failed to follow the Company's oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Goods or (if there are none) good trade practice.

- the Customer has not altered or repaired such Goods without the written consent of the Company. Any unauthorised repairs or alterations/adaptations to the installation by others will automatically invalidate this guarantee.

- this guarantee does not cover any accidental damage (including overloading), improper use, due to force majeure, any surface covering wear and tear (where supplied), misuse or incorrect maintenance of the products/installation.

- this guarantee does not cover any problems associated with fading or discolouration of any surface finishes (where supplied) if improper chemicals or cleaning methods are used or any natural colour changes of the finish caused by prolonged exposure to sunlight.

Notice

the Customer is required to provide written notice of the defect within 7 days from the date of delivery or (where the defect or failure was not apparent on reasonable inspection) or within 31 days after discovery of the defect or failure; and that Accsys or the flooring component manufacturing company are given a reasonable opportunity after receiving the notice to examine the reported defective components or installation.

Limitations

In the event of a warranty claim to the products, the claim shall not exceed the original payment price of the product/services by the customer. Accsys Projects Ltd shall not be liable for incidental or consequential damages resulting from any breach of this warranty.

This warranty is not transferable and may not be assigned, and may not be modified unless agreed in writing, and signed by authorised representative of Accsys Projects Ltd.

This Guarantee is without prejudice to the customer's statutory rights.

9 TEST & COMMISSIONING RECORDS

Reference	Description
9.1	RMG600 Raised floor system test report

Building Testing Limited
Unit 12
Wintonlea Industrial Estate
Monument Way West
Woking
Surrey GU21 5EN

[t] 01483 766999
[f] 01483 766111
[e] info@buildingtesting.co.uk
[w] www.buildingtesting.co.uk

TEST REPORT F2500/6820

KINGSPAN RAISED ACCESS FLOOR SYSTEM
RMG 600 PANEL WITH PARTICLEBOARD CORE ON ALPHA V PEDESTALS

MEDIUM GRADE FULL ACCESS IN ACCORDANCE WITH
PSA MOB PF2/SPU MARCH 1992.

Mr Phil Major
Kingspan Access Floors Ltd
Burma Drive
Marfleet
Hull
Yorkshire
HU9 5SG

7th May 2013

SUMMARY OF RESULTS		
A full access platform floor system has been tested in accordance with the medium grade requirements of the PSA Method of Building Performance Specification MOB PF2 PS/SPU for Platform floors March 1992. The results are shown below.		
Clause	Test	Result
T1.00	Concavity and convexity	Pass
T2.00	Twist	Pass
T3.00	Panel squareness	Pass
T4.00	Pull off strength of panel edge strip	Not applicable
T5.00	Test for free play	Pass
T6.00	Air leakage rate	Indicative
T7.00	300mm square loading	Pass
T8.00	25mm square point loading	Pass
T8a.00	25mm square point loading on perimeter cut panel	Pass
T9.00	Four point loading	Not applicable
T10.00	Uniformly distributed load	Pass
T11.00	Safety factor	Pass
T1200	Soft body impact	Pass
T13.00	Hard body impact	Pass
T14.00	Pedestal dynamic load	Pass
T15.00	Pedestal strength – horizontal load	Pass
T16.00	Pedestal strength – vertical load	Pass
T17.00	Effect of temperature	Pass
T18.00	Effect of humidity	Pass
T19.00*	Determination of surface spread of flame and index of performance	Pass
T20.00	Small scale fire test	Pass
T20a.00	Thermal properties	Indicative
The system tested complies with the relevant clauses of the Performance specification		

*The tests specified in clause T19.00 of the PSA specification are BS 476: Part 6 Index of performance and Part 7 Surface spread of flame. These tests are not included in BTL's UKAS accreditation and were therefore subcontracted directly by Kingspan Access Floors Ltd to UKAS accredited laboratory no.249 Exova Warrington Fire, whose results are incorporated herein.

1.0 INTRODUCTION

1.1 The following were received from Kingspan Access Floors (KAF):

17/1/13

35 no. RMG (P4) Panels.
55 no. Alpha V pedestals to provide 300mm void and FFH.
35 no. Alpha V pedestals to provide 600mm FFH.
80 no. Field pedestal caps
29 no. Perimeter caps
2 no. Pedestal adhesive

28/3/13

Oversize panels
Additional pedestals/caps as above
Panel screws

1.2 Kingspan Order number 3032322 dated 15/1/13 and verbal and KAF email instructions of 26/3/13 refer.

2.0 MATERIALS DESCRIPTION

2.1 Panels

Reference:	RMG
Access type:	Full
Dimensions:	600mm x 600mm x 31.5mm
Structural grade:	Medium
Weight of panels	Nominal 10.60kg
Panel details:	Particleboard core between top and bottom steel sheets
(see Addendum 1)	0.5mm thick galvanized top steel sheet 30mm thick particleboard core Nominal density of core – 740kg/m³ 0.38mm thick galvanized bottom steel sheet Steel bonded to core

2.2 Pedestals

Reference:	Alpha V
Adjustment range:	540mm to 566mm void height for assessment FFH.
Details: (See Addendum 2)	Baseplate: 100.36mm x 99.96mm x 2.5mm thick with 6.0mm diameter corner holes for mechanical fixing and additional 4 holes adjacent to the support tube. Support tube: 517mm long x 25mm o.d, induction welded to baseplate at 8 points. End 105mm of tube externally threaded. Head: 87mm to 90mm in diameter, 2.85mm thick steel disc induction welded at 8 points onto a 32mm diameter 95mm long socket tapering to 29mm, internally threaded for head height adjustment. 16 holes in the head vary from 4.28mm to 5.5mm in diameter, for stringer screw location and for panel fixing. Locknut: one to retain the pedestal at the required height.
Height of system:	Tested at 600mm FFH. (Shorter pedestals were also supplied for specified tests. These were of the same design to the system test pedestals except tube length of 220mm).

2.3 **Caps**

Reference 1:	K29
Type:	Black plastic caps for panel corner location to each pedestal. 4 raised quadrant dividing lugs, each 29mm high. Holes in the cap aligned with holes in the head for panel screw fixing. The cap located on the head by an 6mm down-turned rim at four points of its periphery. Cap thickness 1.57 mm increasing to 2.53mm at its centre. 4 conductive eyelets fitted, one at each corner of the cap quadrant.
Reference 2:	Perimeter
Type:	Flat black plastics cap for use at floor system perimeter. Cap thickness 2.57mm. Holes in the cap aligned with holes in the head for panel screw fixing. The cap located on the head by an 6mm down-turned rim at four points of its periphery. Top of cap has one raised edge approx 8mm for panel abutment. 4 conductive eyelets fitted.

2.4 **Adhesive**

Reference:	Kingspan Pedestal Adhesive (KPA2)
Type:	1 part polyurethane adhesive

2.5 **Materials for extension to the scope for qualification**

2.6 **Panel type 1:** As per 2.1 for T8a additional test for cut perimeter panel with deviation that sample width reduced from 300mm to 200mm.

Panel type 2:

Reference:	RMG Simploc Oversize
Access type:	Full
Dimensions:	900mm x 600mm x 31.5mm
Structural grade:	Medium
Weight of panels	Nominal 15.33kg
Panel details:	Particleboard core between top and bottom steel trays
	0.5mm thick galvanized top steel sheet
(See Addendum 4)	30mm thick particleboard core
	Nominal density of core – 656kg/m³
	0.5mm thick galvanized bottom steel sheet
	Steel bonded to core
	M6 clearance hole drilled through 2 x corners of panel on one short edge for screw fixing to pedestal head

2.7 **Pedestals** As per 2.2

2.8 **Caps** As per 2.3

2.9 **Adhesive** As per 2.4

2.10 **Screws** M6 x 45 Taptite

3.0 TEST METHODS

3.1 Samples were randomly selected from the batch of materials submitted to BTL and tested in accordance with the Medium Grade requirements of the specification.

3.2 In addition to the specified T8a Cut perimeter test performed on a 300mm wide cut panel, KAF also requested that an additional test be carried out on a sample only 200mm wide. These results are presented in Appendix 3. Extra T8.00 and T11.00 tests were also carried out on oversize RMG panels used with the same system. These results are presented in Appendix 4.

3.3 Unless otherwise specified in the specification, the pedestals were installed at the requested test height to provide a finished floor height of 600mm.

3.4 A record of the average environmental conditions during testing is included where required by the specification.

3.5 The tests were performed during the period January 2013 to May 2013. The results relate specifically to the samples submitted for test.

3.6 For T6.00 test calibration provided by Instrument solutions Ltd.

4.0 RESULTS

Clause	Test	Result	PSA requirement
T1.00	Concavity & Convexity, mm	-0.20 -0.22 -0.16 -0.19 -0.14	0.75mm maximum
15.5°C & 42.0% RH		- = concavity + = convexity	
T2.00	Twist, mm	0.45 0.30 0.30 0.20 0.15	1.00mm maximum
15.5°C & 42.0% RH			

Clause	Test	Diagonal, mm		Difference, mm	% of shortest diagonal	PSA requirement
		ad	bc			
T3.00	Panel squareness	848.0	848.0	0.0	0.00	0.06% maximum
		847.5	848.0	0.5	0.06	
		848.5	848.0	0.5	0.06	
		848.5	848.0	0.5	0.06	
15.5°C & 42.0% RH		848.0	847.5	0.5	0.06	

Clause	Test	Result	PSA requirement
T4.00	Pull off edge strip	No edge strip	Not applicable

Clause	Test	Height of pedestal, mm	Total movement, mm	Movement per 100mm height, mm	PSA requirement
T5.00	Free play in pedestal	566	0.93	0.16	Maximum 1.0mm/ 100mm height
16.0°C & 48.0% RH		566	0.82	0.15	

Clause	Test	Result		PSA requirement
T6.00	Air leakage rate	Pressure, mm wg	Leakage rate, l/min metre	No limit
		2.5	303.0	Test indicative only
		5.0	458.0	
		7.5	561.6	
		10.0	657.0	
		12.5	760.2	
		15.0	842.4	
		17.5	921.6	
		20.0	980.4	
		22.5	1049.4	
		25.0	1110.0	
17.0°C & 40.0% RH		Panels were butted against each other to form the test joints. No neoprene or other type of air seal was used.		

T7.00	300mm Square loading. 4.5kN – test load	Centre of panel	Centre of edge	Centre of adjacent edge	Specified maximum
17.0°C 39.0% RH	Deflection after 23 hours, mm	1.68	1.88	1.67	-
	Deflection after 24 hours, mm	1.68	1.88	1.68	2.4mm
	Stability, mm	0.00	0.00	0.01	0.02mm
	Residual deflection, mm	0.20	0.28	0.08	0.5mm
	Permanent indentation, mm	0.11 (mean)	0.04 (mean)	0.02 (mean)	0.15mm
	Other permanent deformation	None	None	None	Not applicable

T8.00	25mm Square point load. 3.0kN - test load	Centre of panel	Centre of edge	Centre of adjacent edge	Diagonal	Specified maximum
16.5°C 39.5% RH	Deflection after 23 hours, mm	1.60	2.23	2.07	1.50	-
	Deflection after 24 hours, mm	1.60	2.24	2.07	1.50	2.4mm
	Stability, mm	0.00	0.01	0.00	0.00	0.02mm
	Residual deflection, mm	0.19	0.27	0.17	0.13	0.5mm
	Permanent indentation, mm	0.03	0.03	0.03	0.06	0.15mm
	Other permanent deformation	None	None	None	None	Not applicable

Clause	Test	Result			PSA requirement
T8a.00	25mm Square point load 3.0kN on perimeter cut edge	Mid span pedestal support Tested between peds at cut edge			Specified maximum
	Deflection after 23 hours, mm	2.28			
17.0°C	Deflection after 24 hours, mm	2.28			2.4mm
	Stability, mm	0.00			0.02mm
37.0% RH	Residual deflection, mm	0.14			0.5mm
	Permanent indentation, mm	0.15			0.15mm
	Other permanent deformation	None			Not applicable
T9.00	Four point loading	Not applicable			Not applicable
T10.00	Uniformly distributed load 8kN/m²	Centre of panel	Centre of edge (mean)		Specified maximum
	Deflection after 23 hours, mm	1.13	1.02		
18.0°C	Deflection after 24 hours, mm	1.13	1.02		2.4mm
	Stability, mm	0.00	0.00		0.02mm
46.5% RH	Residual deflection, mm	0.15	0.16		0.5mm
	Other permanent deformation	None	None		Not applicable
T11.00	Safety Factor load	Centre of panel	Centre of edge	Diagonal	PSA Specified
17.0°C 38.0% RH	T7.00 300mm square loading 13.5kN	Did Not collapse	Did Not collapse	N/a	13.5kN for 5 mins - no collapse
17.0°C 38.0% RH	T8.00 25mm square point load 9.0kN	Did Not collapse	Did Not collapse	Did Not collapse	9.0kN for 5 mins - no collapse
17.0°C 35.0% RH	T8a.00 25mm square point load 9.0kN on cut perimeter panel.	Mid span pedestal installed. Centre of span between pedestals.			
		Did Not collapse			
16.0°C 47.0% RH	T10.00 UDL 24kN/m²	Centre of panel			24kN/m² for 5 mins - no collapse
		Did Not collapse			
T12.00	Soft body impact	Centre of panel	Centre of edge		PSA specified
18.0°C 44.0% RH		Did Not collapse	Did Not collapse		No collapse
	Permanent deformation	Concavity, mm			Observation
		-0.13	-0.16		

Clause	Test	Result				PSA requirement
T13.00 16.0°C 47.0% RH	Hard body impact	Centre of panel	Centre of edge	Centre of adjacent edge	Diagonal	No collapse
		Did Not collapse	Did Not collapse	Did Not collapse	Did Not collapse	
	Permanent deformation	Indentation, mm				Observation
		-0.64	-0.27	-0.33	-0.48	

T14.00	Pedestrian Dynamic Load	First 10 cycles	Last 10 cycles	Specified maximum
	Mean horizontal movement, mm	0.78	0.79	1.5mm
	Mean vertical deflection, mm	0.57	0.67	1.00mm
17.0°C 40.0% RH	Change in horizontal movement mm	+0.01		0.50mm
	Change in vertical deflection, mm	+0.10		0.33mm
	T8.00 25mm Square point load. 3.0kN - test load	Centre of panel		Specified maximum
16.0°C 35.0% RH	Deflection after 23 hours, mm	1.41		
	Deflection after 24 hours, mm	1.41		2.4mm
	Stability, mm	0.00		0.02mm
	Residual deflection, mm	0.12		0.50mm
	Permanent indentation, mm	0.02		0.15mm
	Other permanent deformation	None		

T15.00	Pedestal strength – horizontal load	Height of pedestal	Load, kg	Permanent deformation, mm	Permanent deformation, mm/100mm height	Specified maximum
		566 566	16.22 16.22	1.99 1.15	0.35 0.20	1.00mm/ 100mm height
16.0°C & 37.0% RH		Debonding - There was no detachment of either pedestal base from the substrate				

T16.00	Pedestal strength – vertical load	Applied to centre of pedestal head. 18kN	Applied to one quadrant of pedestal head. 13.5kN	Specified maximum
17.0°C & 40.0% RH		Two samples - Did not collapse	Two samples - Did not collapse	No collapse for either test method

Clause	Test	Result			PSA requirement
T17.00	Effect of temperature	Initial	5°C	30°C	Specified maximum
	Concavity (-) & convexity (+), mm	-0.107	-0.011	+0.125	
	Twist, mm	0.30	0.30	0.15	
	Panel squareness, %	848	848	848	
		5°C		30°C	
	Change in concavity and convexity, mm	+0.096		+0.232	0.75mm
	Change in twist, mm	0.00		-0.15	1.00mm
	Change in panel squareness, %	0.00		0.00	0.06%
16.0°C 40.0% RH	T8.00 25mm Square point load -3.0kN	Centre of edge			Specified maximum
	Deflection after 23 hours, mm	2.09			
	Deflection after 24 hours, mm	2.10			2.4mm
	Stability, mm	0.01			0.02mm
	Residual deflection, mm	0.18			0.50mm
	Permanent indentation, mm	0.02			0.15mm
	Other permanent deformation	No delamination or visible signs of deterioration			Satisfactory
T18.00	Effect of humidity	Initial	23°C 25%rh	23°C 75% rh	Specified maximum
	Concavity & convexity, mm	-0.12	+0.04	+0.06	
	Twist, mm	0.50	0.55	0.50	
	Panel squareness, %	848	848	848	
		23°C 25% rh		23°C 75% rh	
	Change in concavity and convexity, mm	+0.16		+0.18	0.75mm
	Change in twist, mm	+0.05		0.00	1.00mm
	Change in panel squareness, %	0.00		0.00	0.06%
16.5°C 37.0% RH	T8.00 25mm Square point load - 3.0kN	Centre of edge			
	Deflection after 23 hours, mm	2.22			
	Deflection after 24 hours, mm	2.22			2.4mm
	Stability, mm	0.00			0.02mm
	Residual deflection, mm	0.25			0.50mm
	Permanent indentation, mm	0.01			0.15mm
	Other permanent deformation	None			Not applicable

Clause	Test	Result	PSA requirement
T19.00	Surface spread of flame	Class 1*	Class 1
	Fire propagation index I	2.8*	Not exceeding 12
	Sub index i_1 Sub index i_2 Sub index i_3	0.7* 0.4* 1.7*	Not exceeding 6
The T19.00 tests are subcontracted and are not part of the UKAS accreditation schedule of BTL. *The results presented above were obtained from samples submitted directly by Kingspan Access Floors to Exova Warrington Fire. A copy of the subcontractors test reports is kept on file at BTL and at KAF. BS 476:Part 6: Fire Propagation; Report no. 324586 dated 20/12/12. BS 476:Part 7: Surface Spread of Flame; Report no. 324587 dated 20/12/12.			

T20.00 18.0°C 35.0% RH	Small scale fire test	No instability, signs of failure or deformation at the end of the test. No flame penetration. Some white smoke was produced. The bottom steel tray of the panel adjacent to the crib completely delaminated, but remained intact and attached. The surrounding panels delaminated by 25% to 100%. The plastics pedestal caps were affected depending on their proximity to the crib. The cap adjacent to the crib melted completely. Other caps closest to the crib melted but retained their lugs. Others were unaffected.		No instability, failure, deformation or flame penetration.
	Observations			
	Maximum deflection, mm	Centre of panel edge	Corner of panel	10mm maximum
		-4.03 (down)	-1.47 (down)	

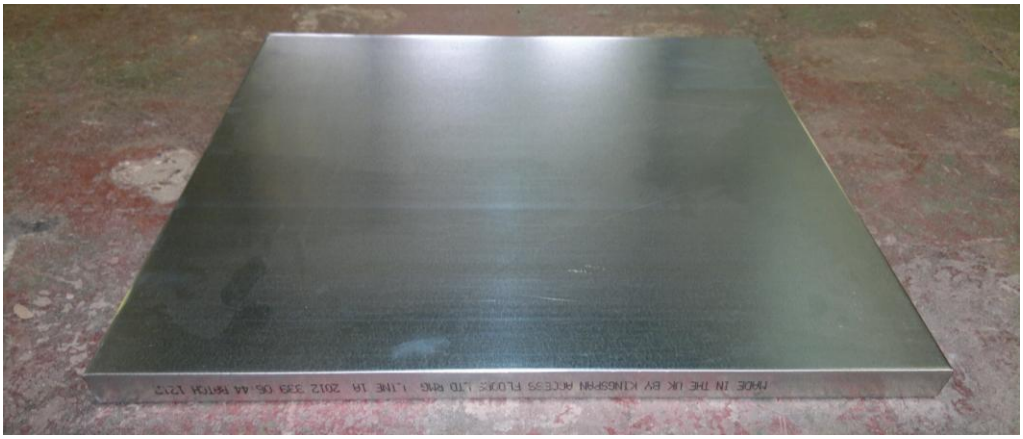
T20a.00 18.0°C 40.0% RH	Thermal properties		No limit Test indicative only
	Maximum top surface temperature, ºC	208.4	
	Mean top surface temperature, ºC	118.9	
	19th thermocouple temperature, ºC	187.7 (adjacent central joint between panels)	
	Observations	The bottom steel sheets delaminated by 100% but remained in position. All caps showed melting to some degree. The top sheets delaminated by approx 20% from either side of the central panel joint .	

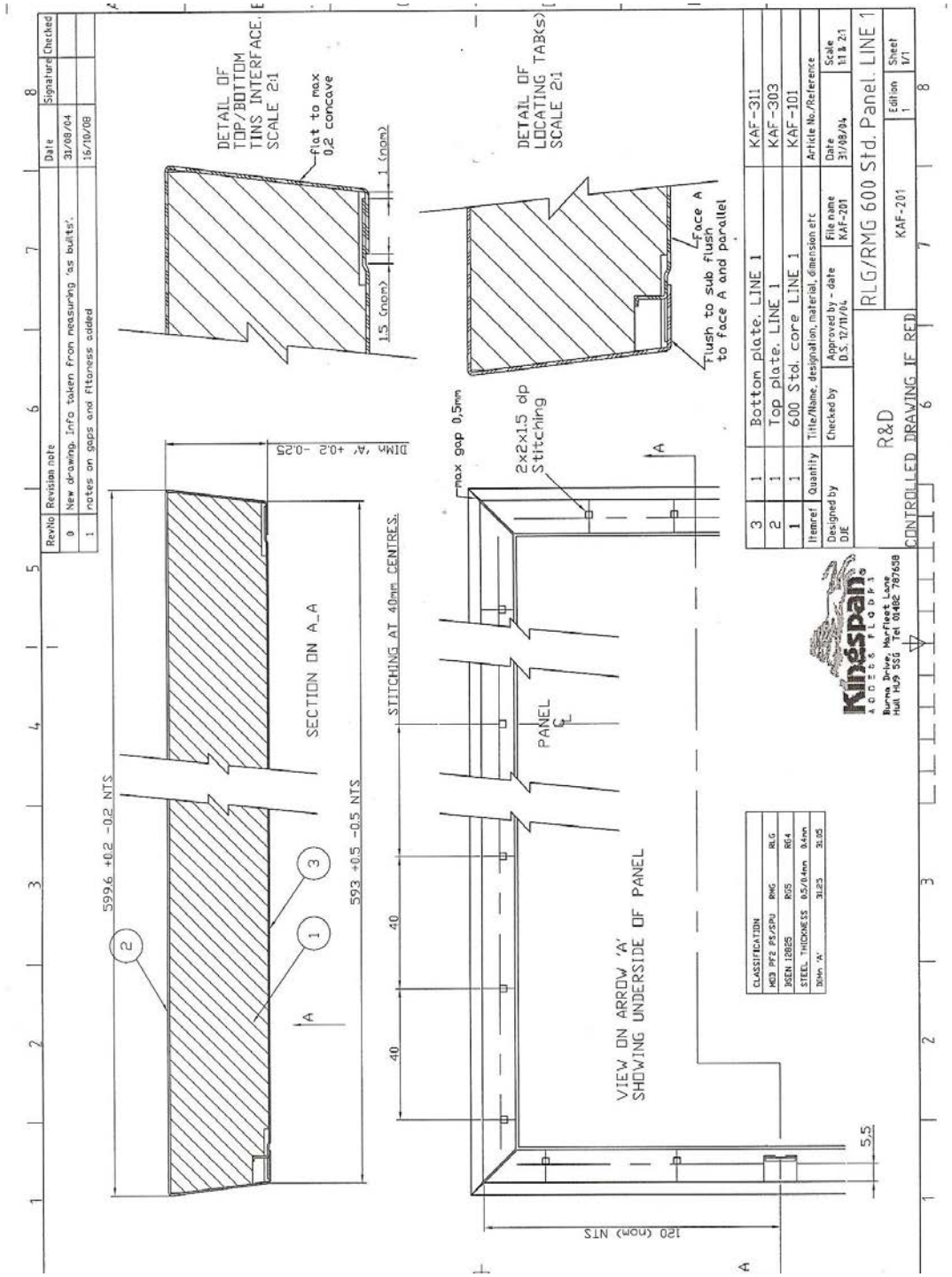
Reported by……..

Ian Collins
Technical Manager

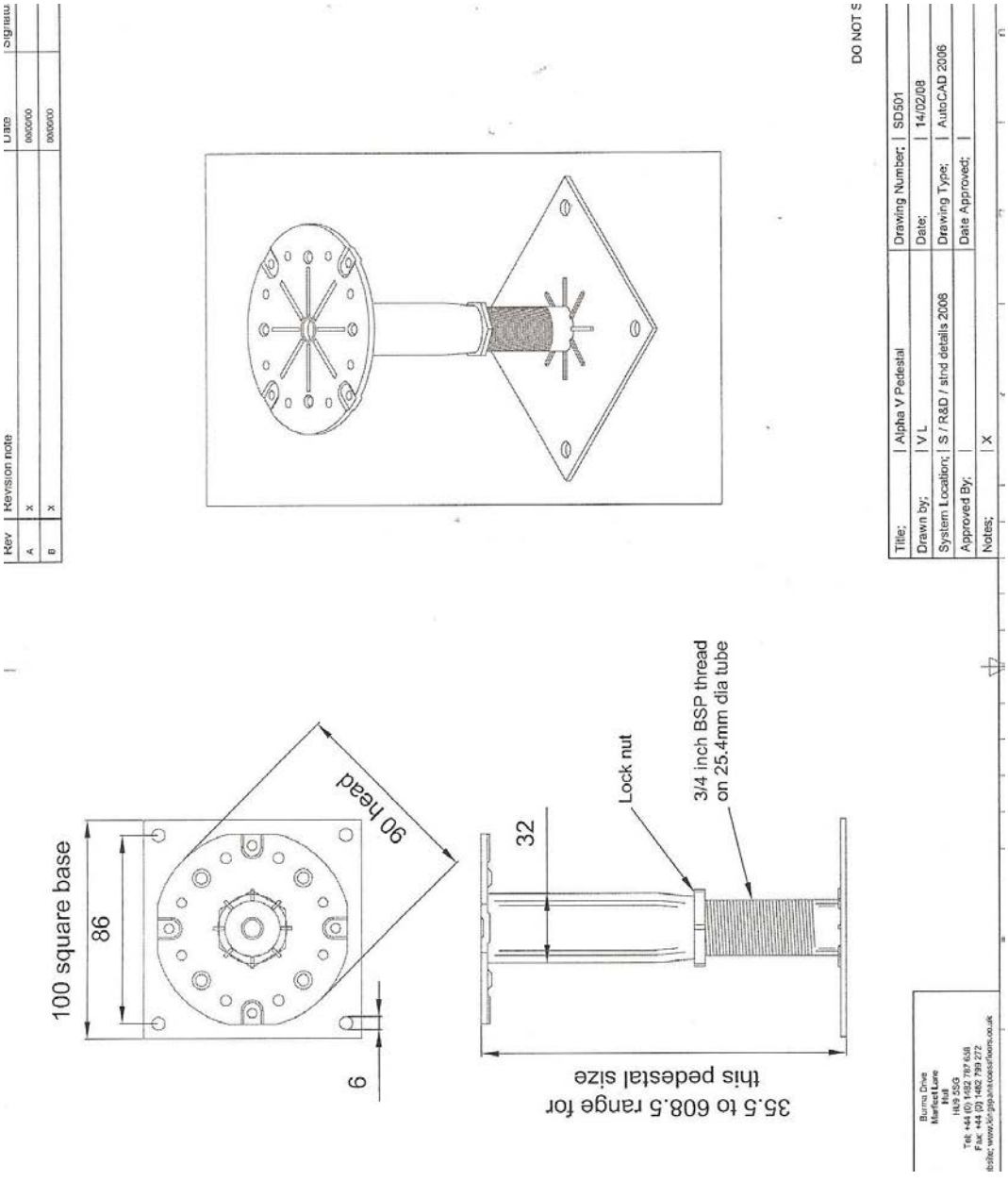
ADDENDUM 1- SYSTEM MATERIALS

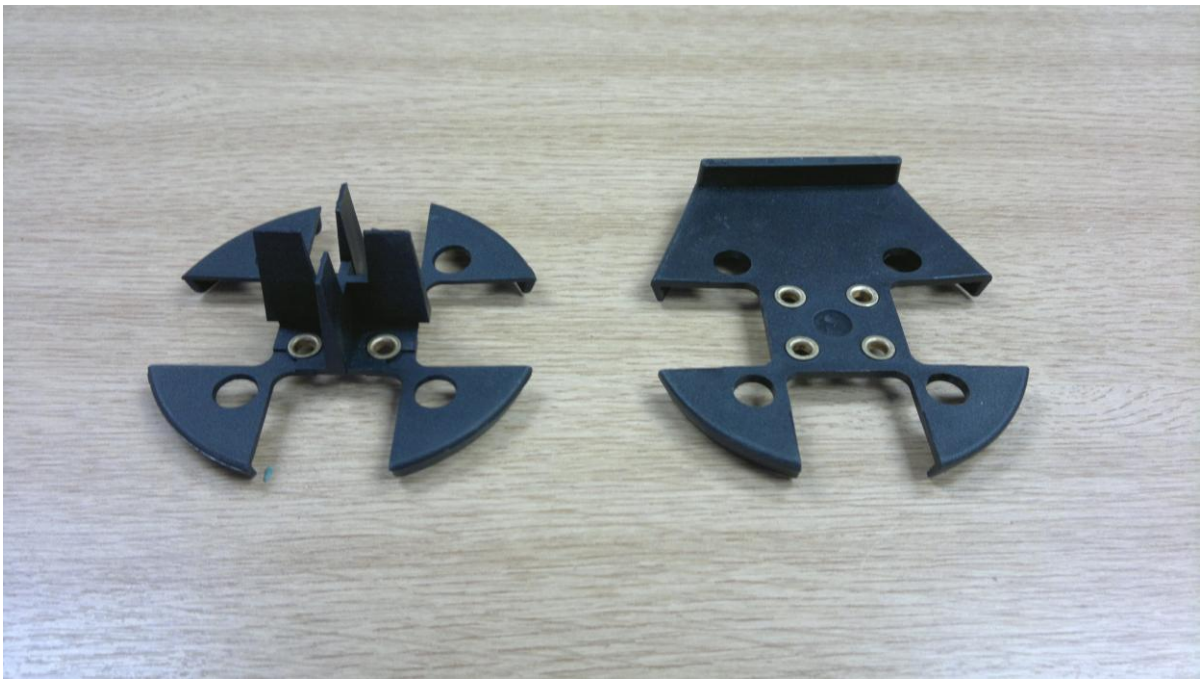
Panel Detail - RMG





ADDENDUM 2
Pedestal detail – Alpha V





Field and perimeter caps

ADDENDUM 3

Results of additional T8a.00 25mm Square point loading test on perimeter cut panel.

Test on 200mm wide cut perimeter panel

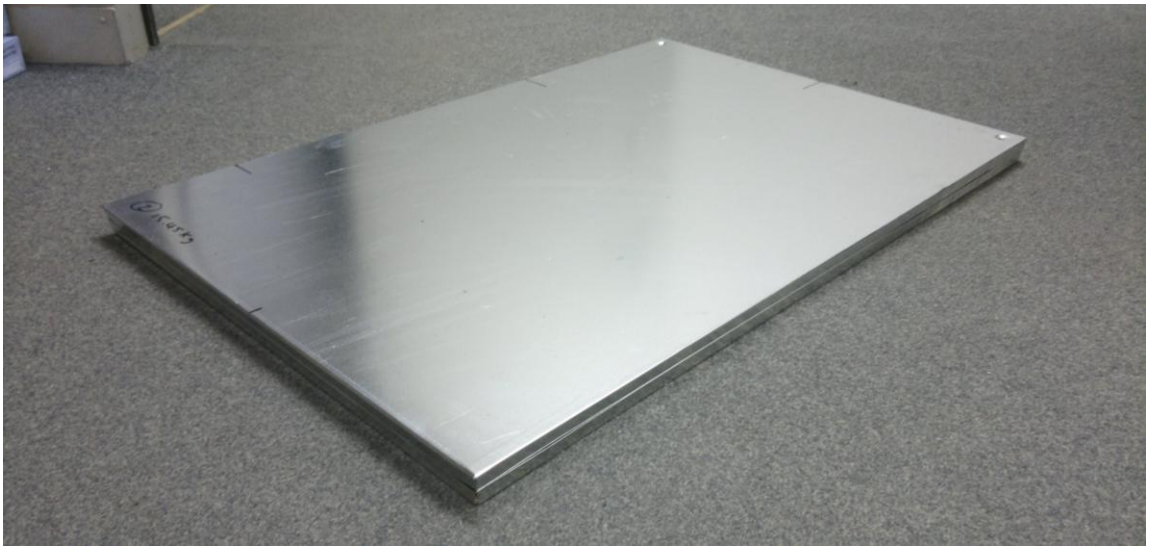
Clause	Test	Result			PSA requirement
T8a.00	25mm Square point load 3.0kN on perimeter cut edge	Mid span pedestal support Tested between peds at cut edge			Specified maximum
16.0°C 35.0% RH	Deflection after 23 hours, mm	2.25			--
	Deflection after 24 hours, mm	2.25			2.4mm
	Stability, mm	0.00			0.02mm
	Residual deflection, mm	0.26			0.5mm
	Permanent indentation, mm	0.05			0.15mm
	Other permanent deformation	None			Not applicable
T11.00	Safety Factor load	Centre of panel	Centre of edge	Diagonal	PSA Specified
16.0°C 35.0% RH	T8a.00 25mm square point load 9.0kN on cut perimeter panel.	Mid span pedestal installed. Centre of span between pedestals.			No collapse
		Did Not collapse			

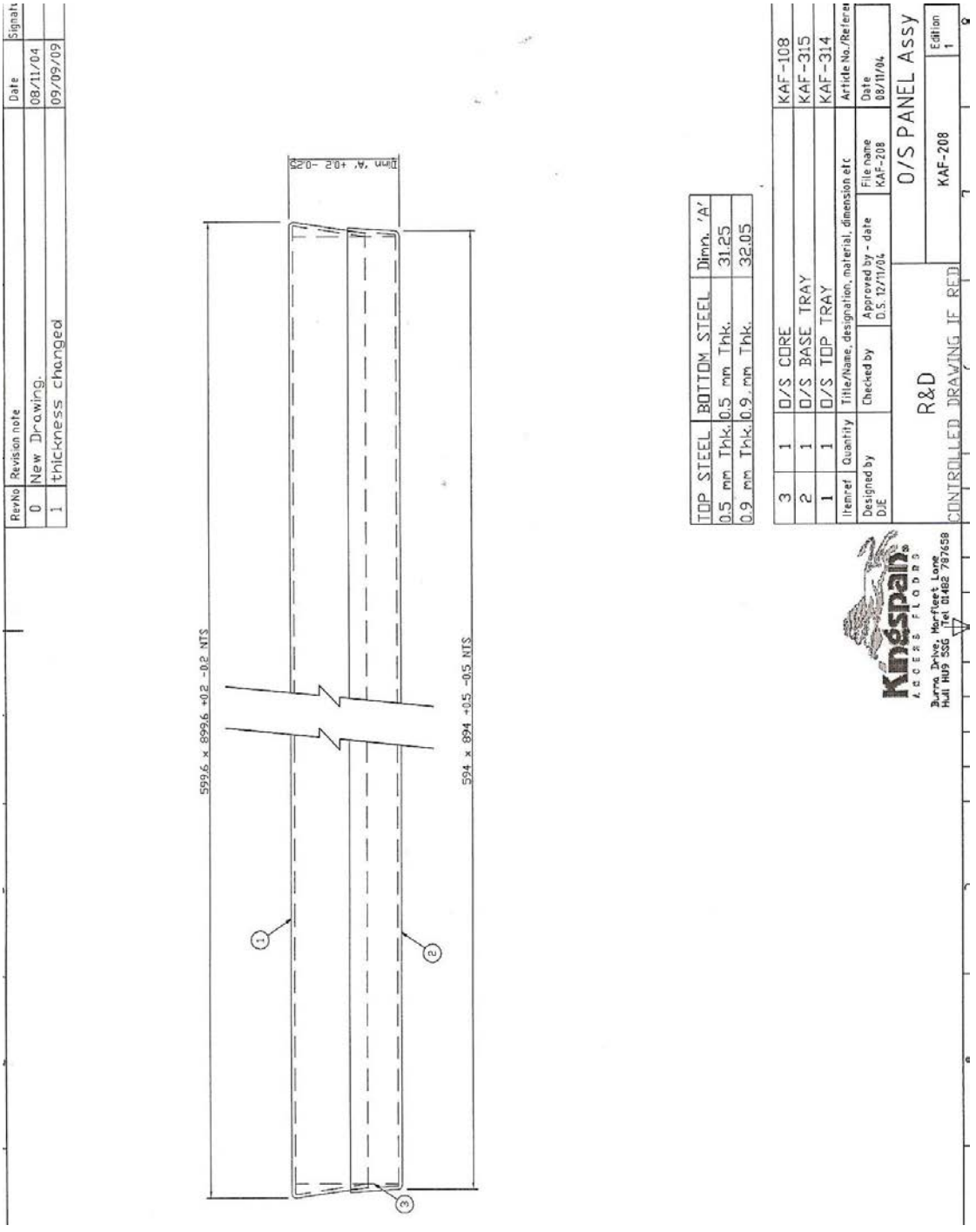
ADDENDUM 4
Results of additional load tests to oversize RMG Simploc panels

Clause	Test	Result		PSA requirement
T8.00	25mm Square point load. 3.0kN - test load	Centre of inboard screwed edge	Centre Adjacent side edge (between 600mm grid peds)	Specified maximum
15.0°C 35.0% RH	Deflection after 23 hours, mm	2.24	2.18	-
	Deflection after 24 hours, mm	2.24	2.18	2.4mm
	Stability, mm	0.00	0.00	0.02mm
	Residual deflection, mm	0.18	0.07	0.5mm
	Permanent indentation, mm	0.03	0.03	0.15mm
	Other permanent deformation	None	None	Observation
T8a.00	25mm Square point load. 3.0kN cut edge	Mid span pedestal support Tested between peds at cut edge		Specified maximum
16.5°C 35.0% RH	Deflection after 23 hours, mm	1.44		
	Deflection after 24 hours, mm	1.44		2.4mm
	Stability, mm	0.00		0.02mm
	Residual deflection, mm	0.06		0.5mm
	Permanent indentation, mm	0.04		0.15mm
	Other permanent deformation	None		Observation
T11.00	Safety Factor load	Centre of screwed edge	Centre of adjacent edge	PSA Specified
17.0°C 38.0% RH	T8.00 25mm square point load 9.0kN	Did Not collapse	Did Not collapse	9.0kN/m² for 5 mins - no collapse
	T8a.00 25mm square point load 9.0kN on cut perimeter panel.	Mid span pedestal installed. Centre of span between pedestals.		
		Did Not collapse		

Photograph of product submitted for test and panel drawing details are shown over page. One variation to the drawing being that the panel tested had 2 x clearance holes on one short side of the panel for screw fixing panel secure to the pedestal head.

RMG Simploc Oversize panel





RAISED ACCESS FLOOR SYSTEM
PSA

Tested in accordance with
PSA MOB PF2 PS/SPU for raised access floors.

25 YEAR TOTAL SYSTEM WARRANTY §

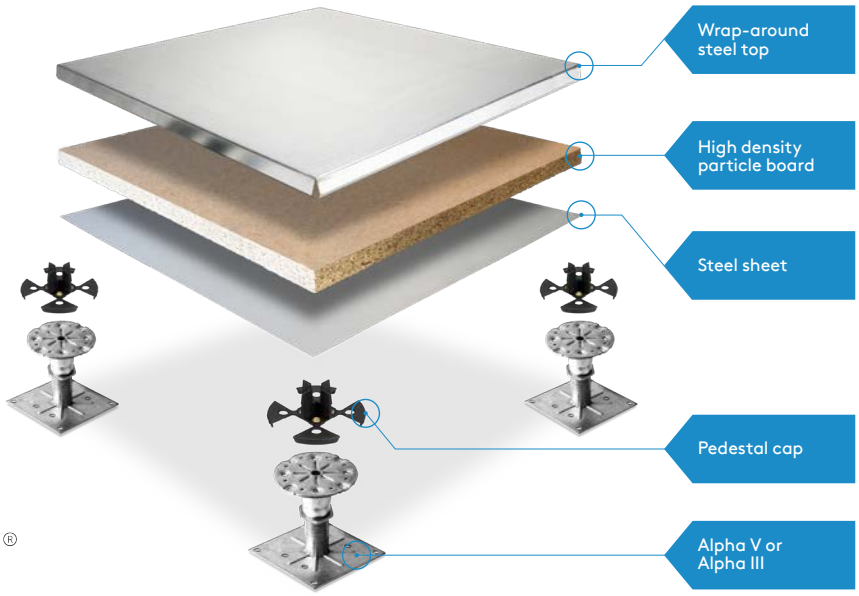
RMG600

MEDIUM GRADE

For: General Office use

The fully encapsulated panel comprises of a wrap around steel top and a steel base plate that are adhesive bonded and mechanically stitched around a particle board core for greater strength and durability.

We've invested in research and development to optimise our energy and raw material usage. This system has EPD & HPD certification and is manufactured in our advanced, energy efficient manufacturing facility where 94% of the energy used is from sustainable sources.



hpdc

EPD®
THE INTERNATIONAL EPD® SYSTEM

Panels	
Thickness:	31mm Nominal
System Weight:	36kg/m² Nominal
Panel Size:	600mm x 600mm†
Core Material:	30mm high density particle board
Category:	Loose lay

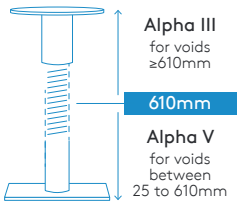
System Performance	
Point load 25 x 25mm:	3kN
Load over 300 x 300mm:	4.5kN
Uniformly Distributed Load (UDL):	8kN/m²

Panel Fire Performance	
Fire Class:	BS476-6 & BS476-7
Reaction:	EN13501:1 Bfl-s1
Resistance:	EN13501:2 R30r/RE30r

System Sound Performance		With barrier	With barrier & covering
Airborne Insulation (Dnfw):	41 dB	47 dB	50 dB
Impact Insulation (Lnfw):	71 dB	63 dB	52 dB

Pedestal Options

Steel pedestals* coated with a environmentally friendly clear passivation.



Pedestal Adhesive:

Standard or Acoustic pedestal adhesives available.

Stringers

Recommended for additional lateral stability in the following applications:

- 600-800mm void heights: clip-on stringer system
- >800mm void heights: screw-down stringer system

Simploc Screw Down

This system is available with pre-drilled holes allowing the panels to be screwed down to the pedestals whilst still providing full access to the floor void.

Underfloor Plenum

This system can be supplied with neoprene gaskets to minimise air loss through the raised floor surface from the underfloor plenum to aid air circulation, distribution and management.

- All working loads perform to a 3x safety factor.
- Finished floor heights from 60mm to 1200mm are available using standard pedestals. For heights outside of this range alternative pedestals are available.
- Structural performance based upon a full Kingspan system i.e. panels & pedestals.

†600 x 900mm medium/heavy grade panels available for perimeter detailing.
* Pivot-head adaptors and Nickel plated pedestals available upon request.
§ Warranty only valid when a full Kingspan Access Floor system including panels and understructure is installed.

SYSTEM CERTIFICATION ISO 9001 SGS
SYSTEM CERTIFICATION ISO 14001 SGS
SYSTEM CERTIFICATION BS OHSAS 18001 SGS
FSC www.fsc.org FSC® C019606 The mark of responsible forestry

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v2 7/2019 UK ROW

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TEST REPORT F2500/6820

KINGSPAN RAISED ACCESS FLOOR SYSTEM
RMG 600 PANEL WITH PARTICLEBOARD CORE ON ALPHA V PEDESTALS

MEDIUM GRADE FULL ACCESS IN ACCORDANCE WITH
PSA MOB PF2/SPU MARCH 1992.

Mr Phil Major
Kingspan Access Floors Ltd
Burma Drive
Marfleet
Hull
Yorkshire
HU9 5SG

7th May 2013

SUMMARY OF RESULTS		
A full access platform floor system has been tested in accordance with the medium grade requirements of the PSA Method of Building Performance Specification MOB PF2 PS/SPU for Platform floors March 1992. The results are shown below.		
Clause	Test	Result
T1.00	Concavity and convexity	Pass
T2.00	Twist	Pass
T3.00	Panel squareness	Pass
T4.00	Pull off strength of panel edge strip	Not applicable
T5.00	Test for free play	Pass
T6.00	Air leakage rate	Indicative
T7.00	300mm square loading	Pass
T8.00	25mm square point loading	Pass
T8a.00	25mm square point loading on perimeter cut panel	Pass
T9.00	Four point loading	Not applicable
T10.00	Uniformly distributed load	Pass
T11.00	Safety factor	Pass
T1200	Soft body impact	Pass
T13.00	Hard body impact	Pass
T14.00	Pedestal dynamic load	Pass
T15.00	Pedestal strength – horizontal load	Pass
T16.00	Pedestal strength – vertical load	Pass
T17.00	Effect of temperature	Pass
T18.00	Effect of humidity	Pass
T19.00*	Determination of surface spread of flame and index of performance	Pass
T20.00	Small scale fire test	Pass
T20a.00	Thermal properties	Indicative
The system tested complies with the relevant clauses of the Performance specification		

*The tests specified in clause T19.00 of the PSA specification are BS 476: Part 6 Index of performance and Part 7 Surface spread of flame. These tests are not included in BTL's UKAS accreditation and were therefore subcontracted directly by Kingspan Access Floors Ltd to UKAS accredited laboratory no.249 Exova Warrington Fire, whose results are incorporated herein.

1.0 INTRODUCTION

1.1 The following were received from Kingspan Access Floors (KAF):

17/1/13

35 no. RMG (P4) Panels.
55 no. Alpha V pedestals to provide 300mm void and FFH.
35 no. Alpha V pedestals to provide 600mm FFH.
80 no. Field pedestal caps
29 no. Perimeter caps
2 no. Pedestal adhesive

28/3/13

Oversize panels
Additional pedestals/caps as above
Panel screws

1.2 Kingspan Order number 3032322 dated 15/1/13 and verbal and KAF email instructions of 26/3/13 refer.

2.0 MATERIALS DESCRIPTION

2.1 Panels

Reference:	RMG
Access type:	Full
Dimensions:	600mm x 600mm x 31.5mm
Structural grade:	Medium
Weight of panels	Nominal 10.60kg
Panel details:	Particleboard core between top and bottom steel sheets
(see Addendum 1)	0.5mm thick galvanized top steel sheet 30mm thick particleboard core Nominal density of core – 740kg/m³ 0.38mm thick galvanized bottom steel sheet Steel bonded to core

2.2 Pedestals

Reference:	Alpha V
Adjustment range:	540mm to 566mm void height for assessment FFH.
Details: (See Addendum 2)	Baseplate: 100.36mm x 99.96mm x 2.5mm thick with 6.0mm diameter corner holes for mechanical fixing and additional 4 holes adjacent to the support tube. Support tube: 517mm long x 25mm o.d, induction welded to baseplate at 8 points. End 105mm of tube externally threaded. Head: 87mm to 90mm in diameter, 2.85mm thick steel disc induction welded at 8 points onto a 32mm diameter 95mm long socket tapering to 29mm, internally threaded for head height adjustment. 16 holes in the head vary from 4.28mm to 5.5mm in diameter, for stringer screw location and for panel fixing. Locknut: one to retain the pedestal at the required height.
Height of system:	Tested at 600mm FFH. (Shorter pedestals were also supplied for specified tests. These were of the same design to the system test pedestals except tube length of 220mm).

2.3 **Caps**

Reference 1:	K29
Type:	Black plastic caps for panel corner location to each pedestal. 4 raised quadrant dividing lugs, each 29mm high. Holes in the cap aligned with holes in the head for panel screw fixing. The cap located on the head by an 6mm down-turned rim at four points of its periphery. Cap thickness 1.57 mm increasing to 2.53mm at its centre. 4 conductive eyelets fitted, one at each corner of the cap quadrant.
Reference 2:	Perimeter
Type:	Flat black plastics cap for use at floor system perimeter. Cap thickness 2.57mm. Holes in the cap aligned with holes in the head for panel screw fixing. The cap located on the head by an 6mm down-turned rim at four points of its periphery. Top of cap has one raised edge approx 8mm for panel abutment. 4 conductive eyelets fitted.

2.4 **Adhesive**

Reference:	Kingspan Pedestal Adhesive (KPA2)
Type:	1 part polyurethane adhesive

2.5 **Materials for extension to the scope for qualification**

2.6 **Panel type 1:** As per 2.1 for T8a additional test for cut perimeter panel with deviation that sample width reduced from 300mm to 200mm.

Panel type 2:

Reference:	RMG Simploc Oversize
Access type:	Full
Dimensions:	900mm x 600mm x 31.5mm
Structural grade:	Medium
Weight of panels	Nominal 15.33kg
Panel details:	Particleboard core between top and bottom steel trays
	0.5mm thick galvanized top steel sheet
(See Addendum 4)	30mm thick particleboard core
	Nominal density of core – 656kg/m³
	0.5mm thick galvanized bottom steel sheet
	Steel bonded to core
	M6 clearance hole drilled through 2 x corners of panel on one short edge for screw fixing to pedestal head

2.7 **Pedestals** As per 2.2

2.8 **Caps** As per 2.3

2.9 **Adhesive** As per 2.4

2.10 **Screws** M6 x 45 Taptite

3.0 TEST METHODS

3.1 Samples were randomly selected from the batch of materials submitted to BTL and tested in accordance with the Medium Grade requirements of the specification.

3.2 In addition to the specified T8a Cut perimeter test performed on a 300mm wide cut panel, KAF also requested that an additional test be carried out on a sample only 200mm wide. These results are presented in Appendix 3. Extra T8.00 and T11.00 tests were also carried out on oversize RMG panels used with the same system. These results are presented in Appendix 4.

3.3 Unless otherwise specified in the specification, the pedestals were installed at the requested test height to provide a finished floor height of 600mm.

3.4 A record of the average environmental conditions during testing is included where required by the specification.

3.5 The tests were performed during the period January 2013 to May 2013. The results relate specifically to the samples submitted for test.

3.6 For T6.00 test calibration provided by Instrument solutions Ltd.

4.0 RESULTS

Clause	Test	Result	PSA requirement
T1.00	Concavity & Convexity, mm	-0.20 -0.22 -0.16 -0.19 -0.14	0.75mm maximum
15.5°C & 42.0% RH		- = concavity + = convexity	
T2.00	Twist, mm	0.45 0.30 0.30 0.20 0.15	1.00mm maximum
15.5°C & 42.0% RH			

Clause	Test	Diagonal, mm		Difference, mm	% of shortest diagonal	PSA requirement
		ad	bc			
T3.00	Panel squareness	848.0	848.0	0.0	0.00	0.06% maximum
		847.5	848.0	0.5	0.06	
		848.5	848.0	0.5	0.06	
		848.5	848.0	0.5	0.06	
15.5°C & 42.0% RH		848.0	847.5	0.5	0.06	

Clause	Test	Result	PSA requirement
T4.00	Pull off edge strip	No edge strip	Not applicable

Clause	Test	Height of pedestal, mm	Total movement, mm	Movement per 100mm height, mm	PSA requirement
T5.00	Free play in pedestal	566	0.93	0.16	Maximum 1.0mm/ 100mm height
16.0°C & 48.0% RH		566	0.82	0.15	

Clause	Test	Result		PSA requirement
T6.00	Air leakage rate	Pressure, mm wg	Leakage rate, l/min metre	No limit
		2.5	303.0	Test indicative only
		5.0	458.0	
		7.5	561.6	
		10.0	657.0	
		12.5	760.2	
		15.0	842.4	
		17.5	921.6	
		20.0	980.4	
		22.5	1049.4	
		25.0	1110.0	
17.0°C & 40.0% RH		Panels were butted against each other to form the test joints. No neoprene or other type of air seal was used.		

T7.00	300mm Square loading. 4.5kN – test load	Centre of panel	Centre of edge	Centre of adjacent edge	Specified maximum
17.0°C 39.0% RH	Deflection after 23 hours, mm	1.68	1.88	1.67	-
	Deflection after 24 hours, mm	1.68	1.88	1.68	2.4mm
	Stability, mm	0.00	0.00	0.01	0.02mm
	Residual deflection, mm	0.20	0.28	0.08	0.5mm
	Permanent indentation, mm	0.11 (mean)	0.04 (mean)	0.02 (mean)	0.15mm
	Other permanent deformation	None	None	None	Not applicable

T8.00	25mm Square point load. 3.0kN - test load	Centre of panel	Centre of edge	Centre of adjacent edge	Diagonal	Specified maximum
16.5°C 39.5% RH	Deflection after 23 hours, mm	1.60	2.23	2.07	1.50	-
	Deflection after 24 hours, mm	1.60	2.24	2.07	1.50	2.4mm
	Stability, mm	0.00	0.01	0.00	0.00	0.02mm
	Residual deflection, mm	0.19	0.27	0.17	0.13	0.5mm
	Permanent indentation, mm	0.03	0.03	0.03	0.06	0.15mm
	Other permanent deformation	None	None	None	None	Not applicable

Clause	Test	Result			PSA requirement
T8a.00	25mm Square point load 3.0kN on perimeter cut edge	Mid span pedestal support Tested between peds at cut edge			Specified maximum
	Deflection after 23 hours, mm	2.28			
17.0°C	Deflection after 24 hours, mm	2.28			2.4mm
	Stability, mm	0.00			0.02mm
37.0% RH	Residual deflection, mm	0.14			0.5mm
	Permanent indentation, mm	0.15			0.15mm
	Other permanent deformation	None			Not applicable
T9.00	Four point loading	Not applicable			Not applicable
T10.00	Uniformly distributed load 8kN/m²	Centre of panel	Centre of edge (mean)		Specified maximum
	Deflection after 23 hours, mm	1.13	1.02		
18.0°C	Deflection after 24 hours, mm	1.13	1.02		2.4mm
	Stability, mm	0.00	0.00		0.02mm
46.5% RH	Residual deflection, mm	0.15	0.16		0.5mm
	Other permanent deformation	None	None		Not applicable
T11.00	Safety Factor load	Centre of panel	Centre of edge	Diagonal	PSA Specified
17.0°C 38.0% RH	T7.00 300mm square loading 13.5kN	Did Not collapse	Did Not collapse	N/a	13.5kN for 5 mins - no collapse
17.0°C 38.0% RH	T8.00 25mm square point load 9.0kN	Did Not collapse	Did Not collapse	Did Not collapse	9.0kN for 5 mins - no collapse
17.0°C 35.0% RH	T8a.00 25mm square point load 9.0kN on cut perimeter panel.	Mid span pedestal installed. Centre of span between pedestals.			
		Did Not collapse			
16.0°C 47.0% RH	T10.00 UDL 24kN/m²	Centre of panel			24kN/m² for 5 mins - no collapse
		Did Not collapse			
T12.00	Soft body impact	Centre of panel	Centre of edge		PSA specified
18.0°C 44.0% RH		Did Not collapse	Did Not collapse		No collapse
	Permanent deformation	Concavity, mm			Observation
		-0.13	-0.16		

Clause	Test	Result				PSA requirement
T13.00 16.0°C 47.0% RH	Hard body impact	Centre of panel	Centre of edge	Centre of adjacent edge	Diagonal	No collapse
		Did Not collapse	Did Not collapse	Did Not collapse	Did Not collapse	
	Permanent deformation	Indentation, mm				Observation
		-0.64	-0.27	-0.33	-0.48	

T14.00	Pedestrian Dynamic Load	First 10 cycles	Last 10 cycles	Specified maximum
	Mean horizontal movement, mm	0.78	0.79	1.5mm
	Mean vertical deflection, mm	0.57	0.67	1.00mm
17.0°C 40.0% RH	Change in horizontal movement mm	+0.01		0.50mm
	Change in vertical deflection, mm	+0.10		0.33mm
	T8.00 25mm Square point load. 3.0kN - test load	Centre of panel		Specified maximum
16.0°C 35.0% RH	Deflection after 23 hours, mm	1.41		
	Deflection after 24 hours, mm	1.41		2.4mm
	Stability, mm	0.00		0.02mm
	Residual deflection, mm	0.12		0.50mm
	Permanent indentation, mm	0.02		0.15mm
	Other permanent deformation	None		

T15.00	Pedestal strength – horizontal load	Height of pedestal	Load, kg	Permanent deformation, mm	Permanent deformation, mm/100mm height	Specified maximum
		566 566	16.22 16.22	1.99 1.15	0.35 0.20	1.00mm/ 100mm height
16.0°C & 37.0% RH		Debonding - There was no detachment of either pedestal base from the substrate				

T16.00	Pedestal strength – vertical load	Applied to centre of pedestal head. 18kN	Applied to one quadrant of pedestal head. 13.5kN	Specified maximum
17.0°C & 40.0% RH		Two samples - Did not collapse	Two samples - Did not collapse	No collapse for either test method

Clause	Test	Result			PSA requirement
T17.00	Effect of temperature	Initial	5°C	30°C	Specified maximum
	Concavity (-) & convexity (+), mm	-0.107	-0.011	+0.125	
	Twist, mm	0.30	0.30	0.15	
	Panel squareness, %	848	848	848	
		5°C		30°C	
	Change in concavity and convexity, mm	+0.096		+0.232	0.75mm
	Change in twist, mm	0.00		-0.15	1.00mm
	Change in panel squareness, %	0.00		0.00	0.06%
16.0°C 40.0% RH	T8.00 25mm Square point load -3.0kN	Centre of edge			Specified maximum
	Deflection after 23 hours, mm	2.09			
	Deflection after 24 hours, mm	2.10			2.4mm
	Stability, mm	0.01			0.02mm
	Residual deflection, mm	0.18			0.50mm
	Permanent indentation, mm	0.02			0.15mm
	Other permanent deformation	No delamination or visible signs of deterioration			Satisfactory
T18.00	Effect of humidity	Initial	23°C 25%rh	23°C 75% rh	Specified maximum
	Concavity & convexity, mm	-0.12	+0.04	+0.06	
	Twist, mm	0.50	0.55	0.50	
	Panel squareness, %	848	848	848	
		23°C 25% rh		23°C 75% rh	
	Change in concavity and convexity, mm	+0.16		+0.18	0.75mm
	Change in twist, mm	+0.05		0.00	1.00mm
	Change in panel squareness, %	0.00		0.00	0.06%
16.5°C 37.0% RH	T8.00 25mm Square point load - 3.0kN	Centre of edge			
	Deflection after 23 hours, mm	2.22			
	Deflection after 24 hours, mm	2.22			2.4mm
	Stability, mm	0.00			0.02mm
	Residual deflection, mm	0.25			0.50mm
	Permanent indentation, mm	0.01			0.15mm
	Other permanent deformation	None			Not applicable

Clause	Test	Result	PSA requirement
T19.00	Surface spread of flame	Class 1*	Class 1
	Fire propagation index I	2.8*	Not exceeding 12
	Sub index i_1 Sub index i_2 Sub index i_3	0.7* 0.4* 1.7*	Not exceeding 6
The T19.00 tests are subcontracted and are not part of the UKAS accreditation schedule of BTL. *The results presented above were obtained from samples submitted directly by Kingspan Access Floors to Exova Warrington Fire. A copy of the subcontractors test reports is kept on file at BTL and at KAF. BS 476:Part 6: Fire Propagation; Report no. 324586 dated 20/12/12. BS 476:Part 7: Surface Spread of Flame; Report no. 324587 dated 20/12/12.			

T20.00 18.0°C 35.0% RH	Small scale fire test	No instability, signs of failure or deformation at the end of the test. No flame penetration. Some white smoke was produced. The bottom steel tray of the panel adjacent to the crib completely delaminated, but remained intact and attached. The surrounding panels delaminated by 25% to 100%. The plastics pedestal caps were affected depending on their proximity to the crib. The cap adjacent to the crib melted completely. Other caps closest to the crib melted but retained their lugs. Others were unaffected.		No instability, failure, deformation or flame penetration.
	Observations			
	Maximum deflection, mm	Centre of panel edge	Corner of panel	10mm maximum
		-4.03 (down)	-1.47 (down)	

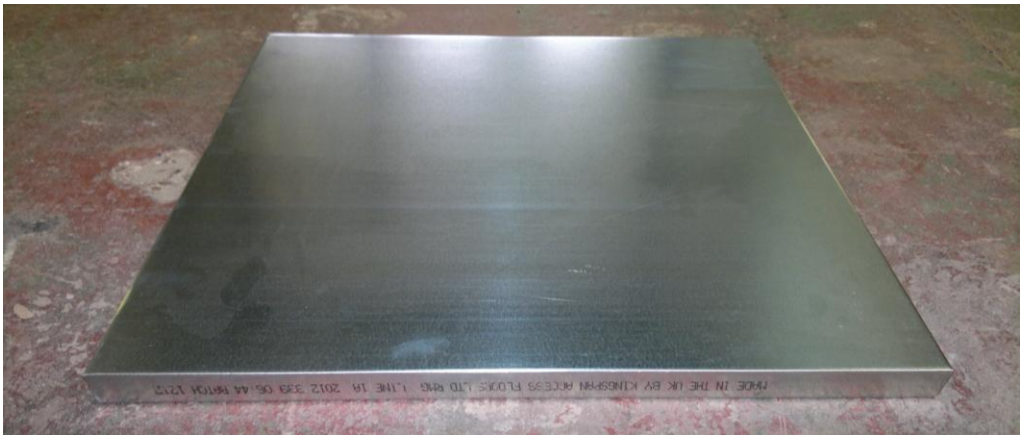
T20a.00 18.0°C 40.0% RH	Thermal properties		No limit Test indicative only
	Maximum top surface temperature, ºC	208.4	
	Mean top surface temperature, ºC	118.9	
	19th thermocouple temperature, ºC	187.7 (adjacent central joint between panels)	
	Observations	The bottom steel sheets delaminated by 100% but remained in position. All caps showed melting to some degree. The top sheets delaminated by approx 20% from either side of the central panel joint .	

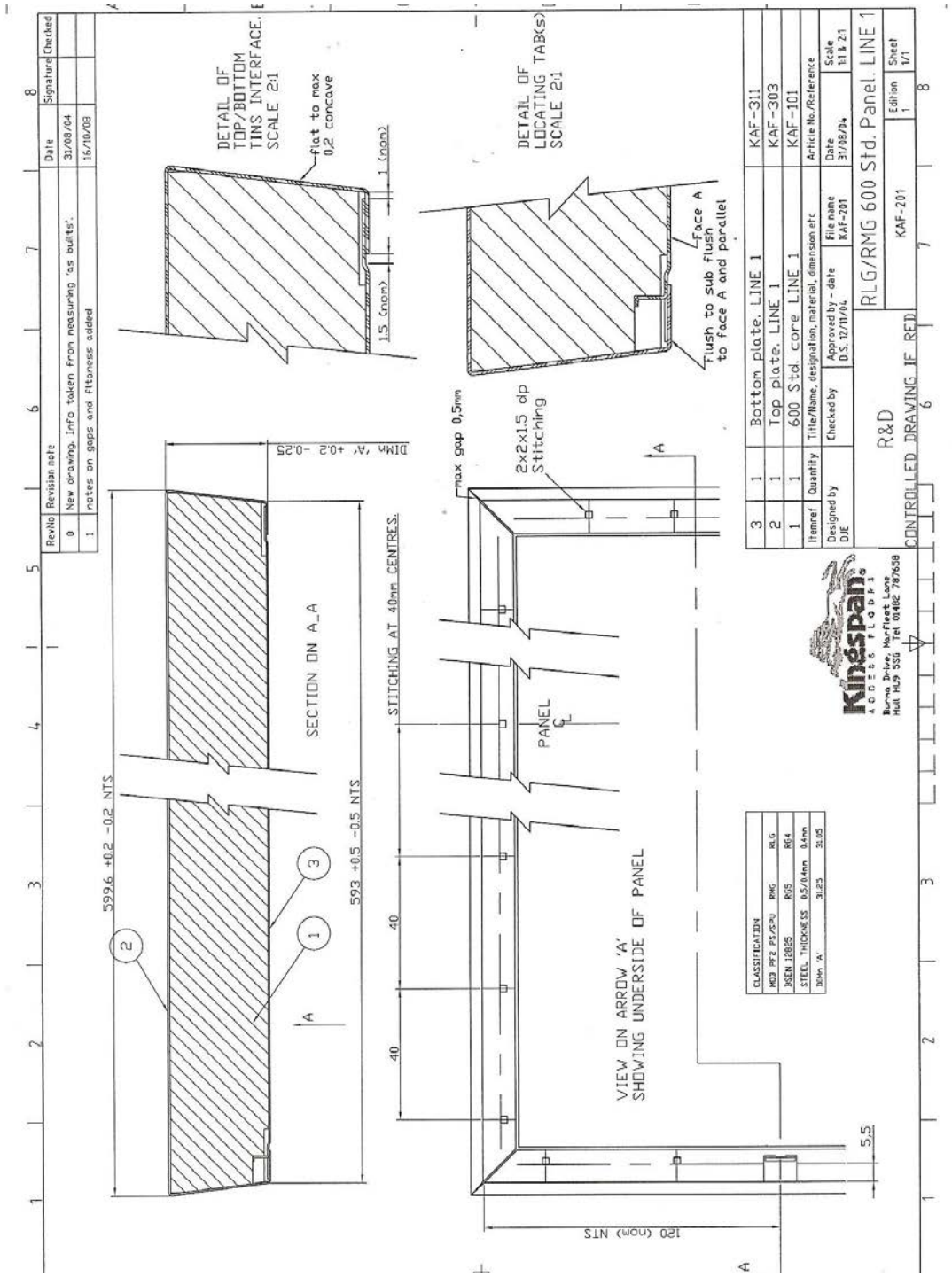
Reported by……..

Ian Collins
Technical Manager

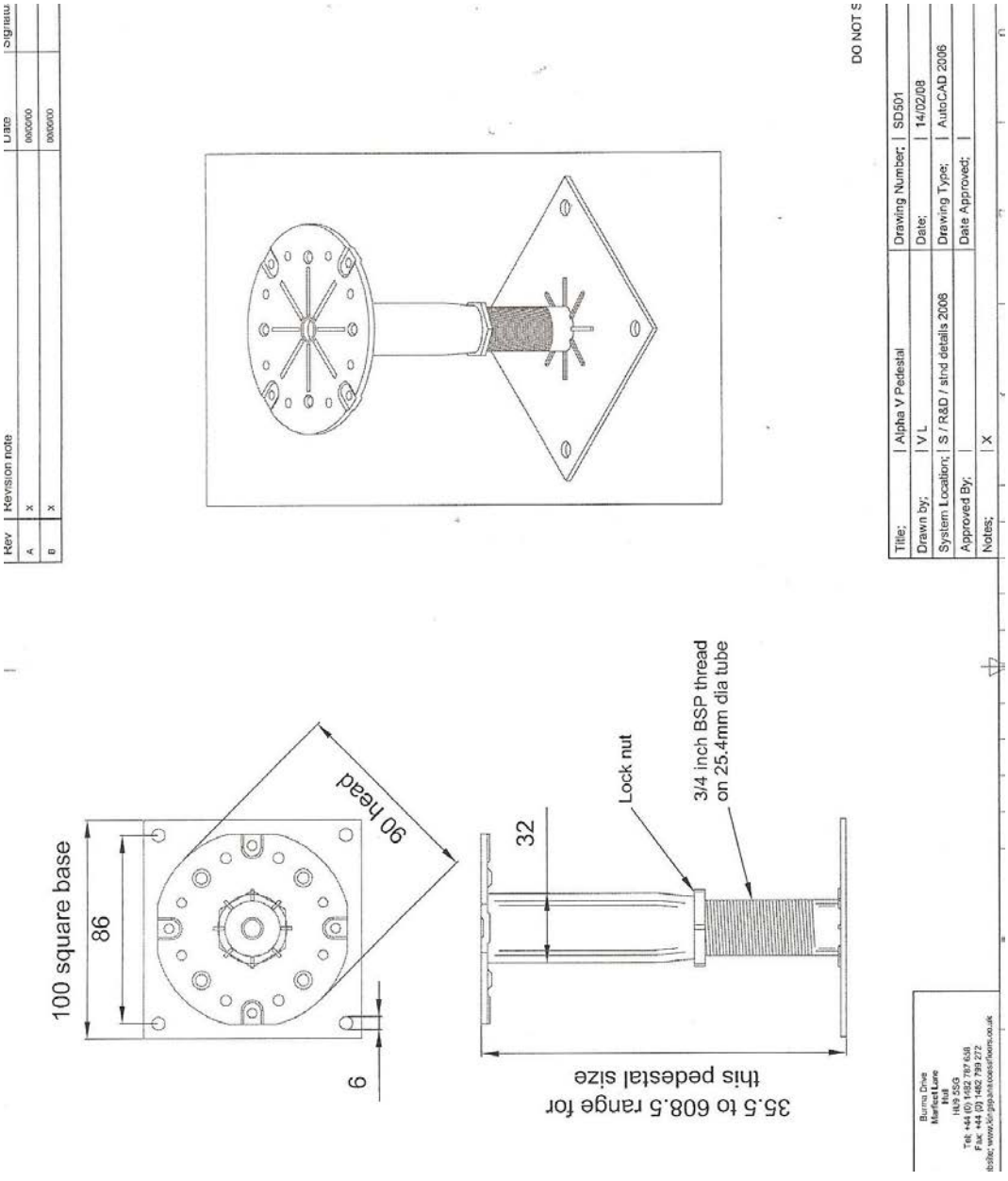
ADDENDUM 1- SYSTEM MATERIALS

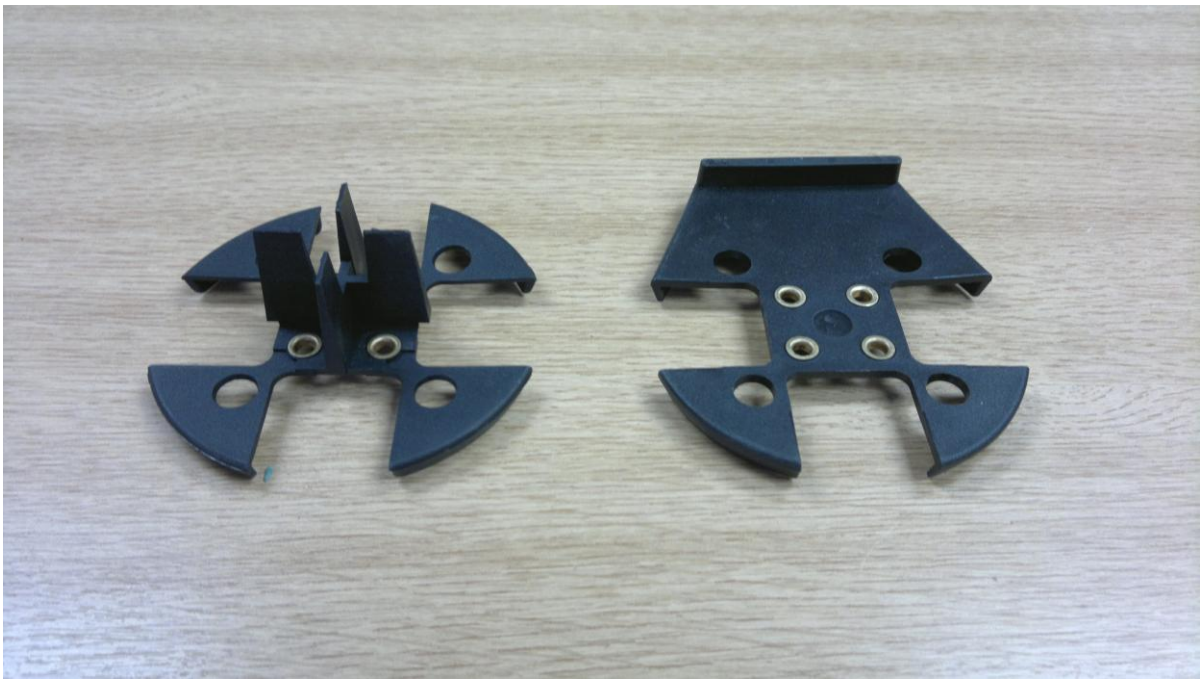
Panel Detail - RMG





ADDENDUM 2
Pedestal detail – Alpha V





Field and perimeter caps

ADDENDUM 3

Results of additional T8a.00 25mm Square point loading test on perimeter cut panel.

Test on 200mm wide cut perimeter panel

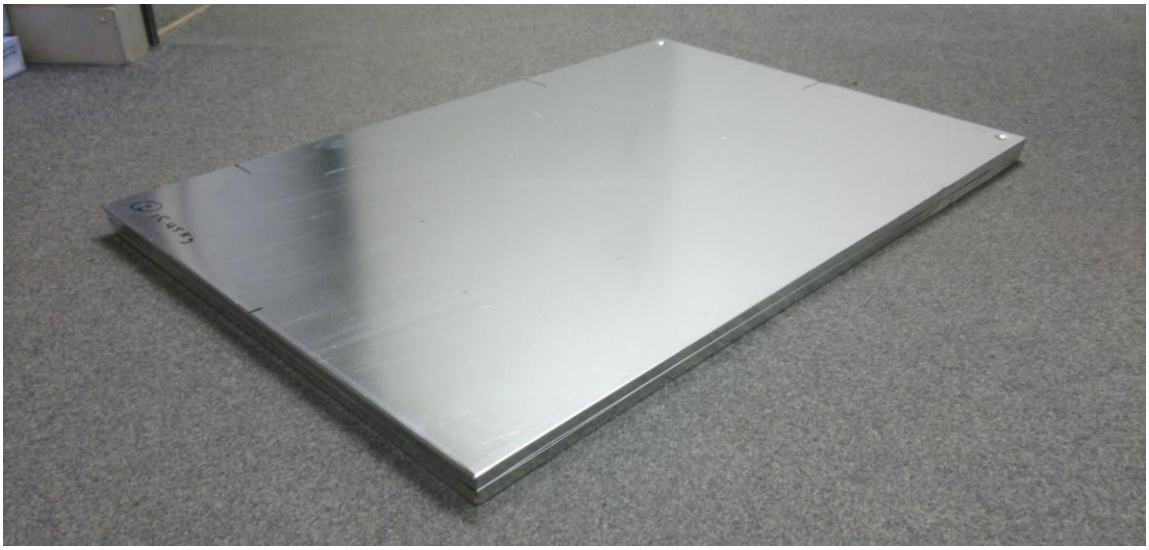
Clause	Test	Result			PSA requirement
T8a.00	25mm Square point load 3.0kN on perimeter cut edge	Mid span pedestal support Tested between peds at cut edge			Specified maximum
16.0°C 35.0% RH	Deflection after 23 hours, mm	2.25			--
	Deflection after 24 hours, mm	2.25			2.4mm
	Stability, mm	0.00			0.02mm
	Residual deflection, mm	0.26			0.5mm
	Permanent indentation, mm	0.05			0.15mm
	Other permanent deformation	None			Not applicable
T11.00	Safety Factor load	Centre of panel	Centre of edge	Diagonal	PSA Specified
16.0°C 35.0% RH	T8a.00 25mm square point load 9.0kN on cut perimeter panel.	Mid span pedestal installed. Centre of span between pedestals.			No collapse
		Did Not collapse			

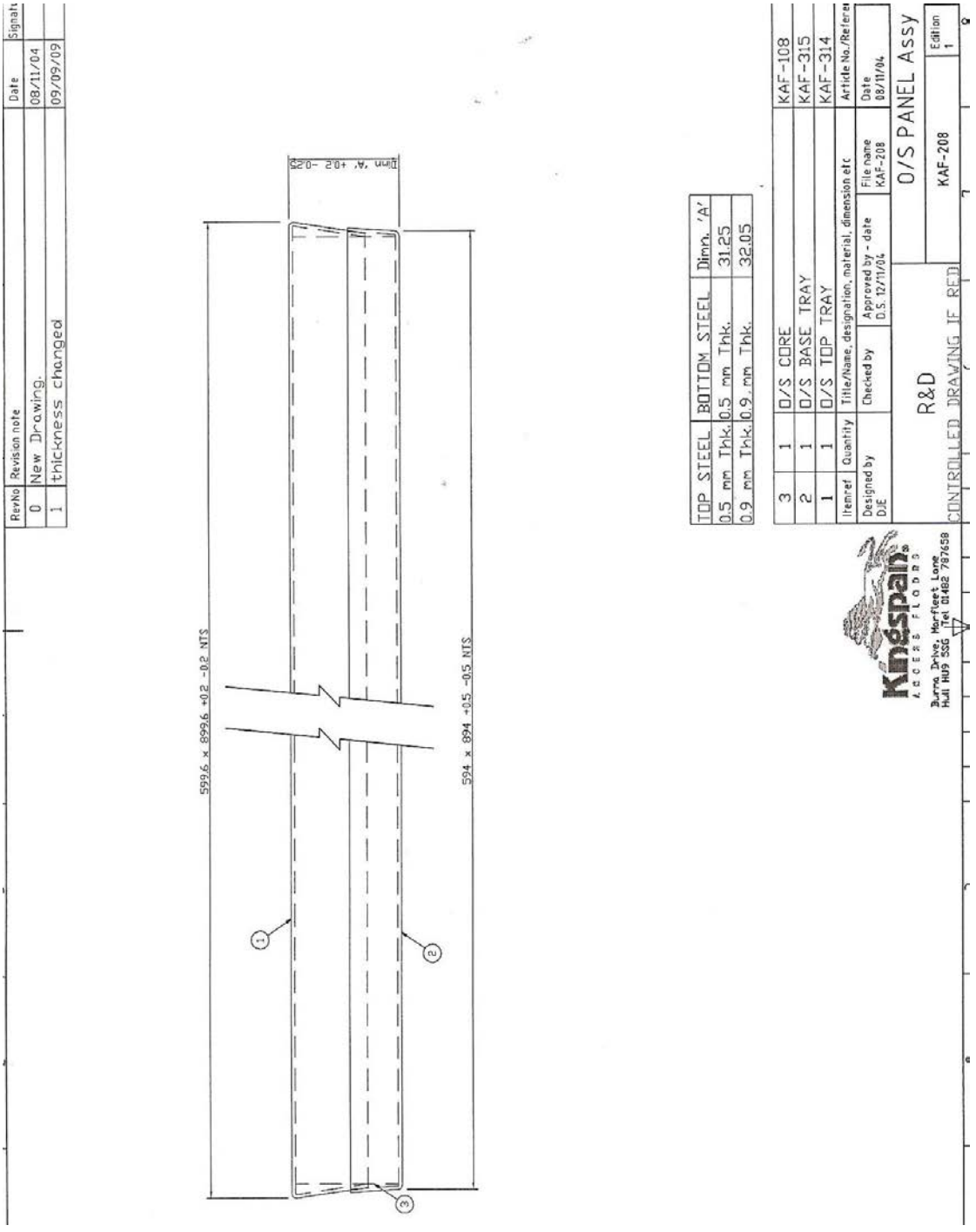
ADDENDUM 4
Results of additional load tests to oversize RMG Simploc panels

Clause	Test	Result		PSA requirement
T8.00	25mm Square point load. 3.0kN - test load	Centre of inboard screwed edge	Centre Adjacent side edge (between 600mm grid peds)	Specified maximum
15.0°C 35.0% RH	Deflection after 23 hours, mm	2.24	2.18	-
	Deflection after 24 hours, mm	2.24	2.18	2.4mm
	Stability, mm	0.00	0.00	0.02mm
	Residual deflection, mm	0.18	0.07	0.5mm
	Permanent indentation, mm	0.03	0.03	0.15mm
	Other permanent deformation	None	None	Observation
T8a.00	25mm Square point load. 3.0kN cut edge	Mid span pedestal support Tested between peds at cut edge		Specified maximum
16.5°C 35.0% RH	Deflection after 23 hours, mm	1.44		
	Deflection after 24 hours, mm	1.44		2.4mm
	Stability, mm	0.00		0.02mm
	Residual deflection, mm	0.06		0.5mm
	Permanent indentation, mm	0.04		0.15mm
	Other permanent deformation	None		Observation
T11.00	Safety Factor load	Centre of screwed edge	Centre of adjacent edge	PSA Specified
17.0°C 38.0% RH	T8.00 25mm square point load 9.0kN	Did Not collapse	Did Not collapse	9.0kN/m² for 5 mins - no collapse
	T8a.00 25mm square point load 9.0kN on cut perimeter panel.	Mid span pedestal installed. Centre of span between pedestals.		
		Did Not collapse		

Photograph of product submitted for test and panel drawing details are shown over page. One variation to the drawing being that the panel tested had 2 x clearance holes on one short side of the panel for screw fixing panel secure to the pedestal head.

RMG Simploc Oversize panel





Cleaning and Maintenance Regimes

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Cleaning and Maintenance Regimes

This maintenance schedule for Calder Park is to be followed from PC year on year to ensure all plant and equipment is kept within warranty.

Please keep a log of these inspections so that records can be checked should an issue arise.

Code; ✓ **Blue – Recommended** ✓ **Red – To Maintain Warranty**

Item	Daily	Weekly	Monthly	3 Months	6 Months	9 Months	Annually	5 Yearly	Certificates	Regime
Raised Floor Panel							✓			Walk across floor / check lipping, gaps, loose panels. Dry mopping only

4 MAINTENANCE / CLEANING INSTRUCTIONS

4.1 Maintenance Procedures Overview

All modifications and repairs to the access flooring system including 'squeaky' or 'rocking' panels must be undertaken by Accsys Projects Ltd or a competent raised floor installer who is a member of the industry trade body, the Access Flooring Association (AFA).

Ensure that the underfloor void is kept clean and that no rubbish/debris is left in the floor void.

Ensure that no dirt/debris is left on the pedestal head when panels are replaced back into position, which can create 'rocking' tiles and noisy floors.

It is advisable to wipe clean all panel edges prior to replacement to ensure that any build-up of dust/debris, particularly if tackifier adhesive has penetrated down the edges of the panels, is removed to ensure the panel can sit correctly within the floor grid and 'squeaks' caused by panel rubbing do not develop.

We recommend that a simple annual inspection survey is carried out. This survey entails walking over the entire area of the installation checking for panels that have been damaged by abnormal use and surveying for replacements; checking the general flooring installation for 'lipping' or 'rocking' tiles and for any damage to the pedestal support understructure.

Cleaning

RMG 600

Whilst in most instances, floor finishes, such are carpets, timber, hard finishes etc, are applied to the surface of the access floor system by other specialist finishes contractors (i.e. not Accsys Projects Ltd), in these instances, advise should be sort directs from the relevant contractor as the cleaning/maintenance instructions for that particular product.

Where the raised floor is left bare the cleaning of the floor should be kept to a dry brush removing any excess of dirt and thereafter vacuumed.

For small, localised cleaning of the bare galvanised steel finish of the access floor panel, this should be undertaken with a barely damp mop using as little water and neutral detergent as possible.

The use of any water must be avoided when underfloor electrical services/floor outlet boxes are in close proximity.

Any water spilt onto the surface of the panel should be removed immediately to avoid staining.

Dry mopping using rotary head polishing machines may be used with care, but no polish or abrasives should be used on the bare panels as polishes are detrimental to the performance of adhesives used in conjunction with floor finishes. Only soft brushes or pads to be used as any abrasion will remove the protective galvanized coating and reduce product life.

4.2 Maintenance Procedures

4.2.1 Cleaning

Maintenance Tasks	Frequency	Notes
Cleaning of floor	When Required	See details above

4.2.2 Yearly Maintenance

Maintenance Tasks	Frequency	Notes
Walk across floor / check lipping, gaps, loose panels	Yearly	After lifted/alterations

Data Sheets

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2 MATERIALS / PART SCHEDULE

2.1 Materials

Material	Product Reference	Name of Supplier	Locations Used / Drawing Reference
RMG Raised Floor Panel	RMG 600	Kingspan Access Floors Ltd	First & Second Floors
Alpha V Pedestal	Alpha V	Kingspan Access Floors Ltd	First & Second Floors
Subfloor Sealer	Acseal PVA	Kingspan Access Floors Ltd	First & Second Floors

2.2 Flooring Systems

RMG600 Kingspan medium grade access floor system.

The Kingspan medium grade raised access floor system incorporates a 600mm x 600mm x 31mm galvanised steel module constructed around a high-density particleboard core.

The panels are encased in a galvanised steel sheet that comprises of a top sheet that is wrapped and laminated around the panel, then mechanically stitched to the bottom steel tray for greater strength and to provide electrical continuity through the panel. This unique wrap-around construction improves edge strength and accessibility and eliminates panel jamming caused by sharp edges.

The panel is supported on Kingspan Alpha V steel support pedestal to suit a finished floor height of 200mm.

The Alpha V pedestal is of steel construction and provides excellent electrical continuity. Lock nuts prevent changes in adjustment while in use and ensure rigid support. The pedestal head is a 90mm diameter steel disc welded to a steel socket which is produced in three lengths.

A PVC pedestal head cap is fitted to provide positive panel location whilst maintaining electrical continuity via a central copper insert through to the pedestal base plate, where earth connections can be made.

This system is designed, manufactured and independently tested to the medium grade requirements of the MOB PF2 PS/SPU performance standard.

Product Performance Summary:

- Point Load 3.0kN over 25mm²
- Uniformly Distributed 8.0kN per m2
- Safety Factor 2 times

2.3 Suppliers Details:

Name	Address	Tel, Web & Email
Kingspan Access Floors Ltd	Burma Drive, Marfleet, Hull, HU9 5SG	Tel: 01482 781701 Email: *enquiries@kingspan.com* Web: *www.kingspanaccessfloors.com*

2.4 COSHH Data Sheet PDFs

No products used in the raised floor installation are hazardous once dry and completed.

3 OPERATING DETAILS / INSTRUCTIONS

RMG 600 raised floor system

The system is designed that when access to the floor void is required, the panels should be lifted vertically using the supplied suction cup panel lifter. Place the suction cup panel lifter in the centre of the panel and lift the panel out vertically from position. Carefully place the panel adjacent to the position it has been removed from.

Once the first panel has been removed using the suction cup panel lifter, the next panel can be lifted out of position by hand and carefully placed adjacent to the position it has been removed from.

Do not use any other tools other than the suction cup panel lifter provided to 'hinge' panels out of position (e.g. screwdrivers) as these will create damage to the edges of the panels and can lead to panels not locating correctly when replaced into position.

Only the absolute minimum number of panels should be removed at any one time in order to maintain maximum system stability. Long lines of tiles or large areas of floor should not be removed in any one time. Only those panels directly over the area of work in the subfloor should be removed.

Panels should be removed in single 'alternative' rows (e.g. row 1, 3, 5 etc) with 1 panel in six left in position for stability. Alternatively, panels should be removed in 'chequerboard' sequence. No support pedestals should be left exposed where it is prone to damage.

Every care should be taken while floor panels are out of the system, not to disturb the adjustment of the access floor pedestal.

On completion of the works, the panels should be placed back onto the pedestal head.

Under no circumstance are the pedestals to be used as 'pulleys' for cables etc.

5 RECOMMENDED SPARES

5.1 Spare Parts Schedule

Description	Supplier Name	Supplier Part Number	Supplied
Panel Lifting tools	Accsys Projects Ltd	N/A	Sent as part of contract
RMG 600 raised floor panel	Kingspan Access Floors Via Accsys Projects Ltd	RMG600	No
Alpha V Pedestal	Kingspan Access Floors Via Accsys Projects Ltd	Alpha V	No

6 MODIFICATION / DISPOSAL INSTRUCTIONS

Modifications

All modifications/adaptations should be undertaken by Accsys Projects Ltd or a reputable raised flooring contractor who is a member of the industry body, The Access Flooring Association (AFA).

All works to be conducted in accordance with a project specific method statement and are to include Risk Assessments, COSSH Assessments and PPE.

No adaptations should be attempted by the client/end user as incorrect modifications can affect the overall floor loading capability of the floor system or create 'rocking'/incorrectly seated panels.

Disposal of Raised Floor System

Kingspan RMG600 Panel - No specific disposal requirements – general waste.

7 MANUFACTURERS LITERATURE PDFS

Ref	Manufacturer	Description
1	Kingspan Access Floors Ltd	RMG600 Panel Data Sheet
2	Kingspan Access Floors Ltd	Pedestal Data Sheet