TECHNICAL REPORT

Maxwell Road
Stevenage
Hertfordshire
SG1 2EW

T: +44(0) 1438 777 700
info@fira.co.uk

www.fira.co.uk

PINEAPPLE CONTRACTS
Westmead
Maidstone
Kent
ME20 6XJ

Our Ref: TSCAF88915
Date: 25 September 2019
Delivery Date: 16 September 2019
Test Dates: 16 September - 23 September 2019

For the attention of Siuling Leung

SAMPLE(S) SUBMITTED FOR TEST AND IDENTIFED BY CUSTOMER AS:

One, Ryno Chest

TEST(S) AS REQUESTED BY CUSTOMER:	**RESULT:**
BS EN 16121: 2013 Test Level 2	Pass*

*Selected Testing Only.

FIRA International
Registered office: 10 Lower Grosvenor Place,
London, UK, SW1W 0EN
Registered in England No: 3181481

TECHNICAL REPORT

DESCRIPTION

Item: Ryno Chest

Supplied by: **PINEAPPLE CONTRACTS**

Number of Photos: One to Two

Overall Dimensions: 725mm High x 690mm Wide x 480mm Deep

ITEM	DESCRIPTION
Material/Thickness	62mm Thick sides, 75mm Thick top
Number/Description of Shelves	44mm Thick, 2 x Shelves
Number/Type of Shelf Supports	None (1 Piece construction)
Wall Hanging / Mounting Information	8 x Mounting holes

All dimensions are approximate.

PRECONDITIONING AND MOISTURE CONTENT

FIRA International cannot validate date of manufacture and therefore it is assumed that at least 4 weeks has elapsed between date of manufacture and delivery to FIRA.
Unless otherwise stated on the first page of this report the sample was stored in indoor ambient conditions for at least the minimum duration as required by this standard prior to test.
Wherever possible timber moisture content is verified prior to test. Where this is not possible the moisture content is assumed to be in the range 8 – 12 %.

BS EN 16121:2013 Non-Domestic Storage Furniture – Requirements for Safety, Strength, Durability and Stability

The tests required were carried out in accordance with the standard. Where applicable details of the loads applied and their positions of application are retained at FIRA International and are available on request. Structural testing machines are set to operate at the tolerances stated in the standard. Uncertainty of Measurement calculations have not been applied. FIRA International Uncertainty of Measurement values are available on request.
The tests were carried out in accordance with the standard, and the clause references of BS EN 16122: 2013.

Item: Ryno Chest

Initial Inspection: No apparent faults

Clause	Test	Result
5	**General safety requirements** (Clause Ref: BS EN 16121: 2013)	
5.2	No burrs or sharp edges.	Not Tested
5.2	No open-ended tubes.	Not Tested
5.2	Movable parts – safety distances.	N/A
5.2	Unintentional loosening of load bearing parts.	Not Tested
5.2	Lubricated components.	N/A
5.2	Roll front (vertical).	N/A
5.2	No pinching of feet.	N/A
5.2	Drawer open stops.	N/A
5.2	External vertical glass ≤ 900 mm.	N/A
5.3.1	Shear and Squeeze (Setting up and folding).	N/A
5.3.2	Shear and Squeeze (Powered Mechanisms).	N/A
5.3.3	Shear and Squeeze (During Use).	Not Tested
5.4	Hinged horizontal lids.	N/A
5.5	Vertical glass component (n/a if meets EN 12150-1: 2000, clause 8 - type B or C).	N/A

Not Tested: Due to customer request.

In extreme weather conditions the ambient test temperature and/or humidity may fall outside the requirements of the standard. Such changes have not been shown to affect the validity of the results. Details of the ambient conditions at time of test are available on request.

BS EN 16121:2013 Non-Domestic Storage Furniture – Requirements for Safety, Strength, Durability and Stability

The tests required were carried out in accordance with the standard. Where applicable details of the loads applied and their positions of application are retained at FIRA International and are available on request. Structural testing machines are set to operate at the tolerances stated in the standard. Uncertainty of Measurement calculations have not been applied. FIRA International Uncertainty of Measurement values are available on request.
The tests were carried out in accordance with the standard, and the clause references of BS EN 16122: 2013.

Item: Ryno Chest

Initial Inspection: No apparent faults

Clause	Test	Result
5.6	**Stability** (Clause Ref: EN 16122: 2012)	
11.2.1	Doors, extension elements and flaps closed, unit unloaded (≤1000mm).	Not Tested
11.2.2	Doors, extension elements and flaps closed, unit unloaded (>1000mm).	N/A
11.4.1	Doors, extension elements and flaps opened.	N/A
11.4.2	All storage areas unloaded with overturning load.	N/A
11.4.3	All storage areas loaded with overturning load.	N/A
11.5	Doors, extension elements and flaps Locked (Loaded).	N/A
11.6	Dynamic Stability For Units with Castors.	N/A

Clause	Test	Result
7	**Information for use** (Clause Ref: BS EN 16121: 2013)	
7a	Information regarding the intended use, reference to test severity where appropriate;	Not Supplied
7b	Assembly instructions, where applicable;	N/A
7c	Instructions for care and maintenance of the storage furniture, where applicable.	Not Supplied

Not Tested: Due to customer request.

In extreme weather conditions the ambient test temperature and/or humidity may fall outside the requirements of the standard. Such changes have not been shown to affect the validity of the results. Details of the ambient conditions at time of test are available on request.

TECHNICAL REPORT

BS EN 16121:2013 Non-Domestic Storage Furniture – Requirements for Safety, Strength, Durability and Stability

The tests required were carried out in accordance with the standard. Where applicable details of the loads applied and their positions of application are retained at FIRA International and are available on request. Structural testing machines are set to operate at the tolerances stated in the standard. Uncertainty of Measurement calculations have not been applied. FIRA International Uncertainty of Measurement values are available on request.
The tests were carried out in accordance with the standard, and the clause references of BS EN 16122: 2013.

Item: Ryno Chest

Initial Inspection: No apparent faults

Clause	Test	Result
5.7	**Structural safety** (Clause Ref: BS EN 16122: 2012)	
6.2.2	Static Load Test for Tops and Bottoms.	Not Tested
6.1.2	Shelf retention (horizontal outward).	Not Tested
6.1.3	Shelf retention (vertical downward).	Not Tested
6.1.5	Strength of Shelf Supports.	N/A
7.1.2	Vertical Load of Pivoted Doors.	N/A
7.1.3	Horizontal Load of Pivoted Doors.	N/A
7.3.1	Strength of Bottom Hinged Flaps.	N/A
7.5.2	Strength of Extension Elements.	N/A
7.5.4	Slam open and shut of Extension Elements.	N/A
7.5.6	Interlock test.	N/A
6.4.1	Strength of Carcase and Underframe.	Not Tested
6.4.3	Test for unit with castors or wheels.	N/A
10.1.3	Overload.	N/A
10.1.4	Dislodgement test.	N/A
10.2	Floor standing units.	Not Tested
5.7.2	Structural safety requirements.	Not Tested

Not Tested: Due to customer request.

In extreme weather conditions the ambient test temperature and/or humidity may fall outside the requirements of the standard. Such changes have not been shown to affect the validity of the results. Details of the ambient conditions at time of test are available on request.

TECHNICAL REPORT

BS EN 16121:2013 Non-Domestic Storage Furniture – Requirements for Safety, Strength, Durability and Stability

The tests required were carried out in accordance with the standard. Where applicable details of the loads applied and their positions of application are retained at FIRA International and are available on request. Structural testing machines are set to operate at the tolerances stated in the standard. Uncertainty of Measurement calculations have not been applied. FIRA International Uncertainty of Measurement values are available on request.
The tests were carried out in accordance with the standard, and the clause references of BS EN 16122: 2013.

Item: Ryno Chest

Initial Inspection: No apparent faults

Clause	Test	Result
6.1	**Strength and durability** (Clause Ref: BS EN 16122: 2012)	
6.3.1	Strength of Clothes Rail Supports.	N/A
9.1	Strength of Coat Hooks.	N/A
7.1.5	Durability of Pivoted Doors.	N/A
7.1.4	Slam shut of Pivoted Doors.	N/A
7.2.2	Slam Shut/Open of Sliding doors and Horizontal Roll Fronts.	N/A
7.2.3	Durability of Sliding Doors.	N/A
7.2.3	Durability of Horizontal Roll Fronts.	N/A
7.3.2	Durability of Flaps.	N/A
7.4.2	Durability of vertical Roll Fronts.	N/A
7.5.3	Durability of Extension Elements.	N/A
7.5.3	Durability of trays.	N/A
7.5.4	Slam open and shut of Extension Elements.	N/A
7.5.5	Displacement of Extension Element Bottoms.	N/A
7.6.2	Strength of Locking and Latching Mechanisms (Extension Elements).	N/A
7.6.3	Strength of Locking and Latching Mechanisms (Doors, Flaps and Roll Fronts).	N/A
6.1.4	Deflection of Shelves.	Pass
6.3.2	Dislodgement of Clothes Rails.	N/A
8.3	Drop Test For Trays.	N/A
8.2	Sustained Load Test for Trays.	N/A

In extreme weather conditions the ambient test temperature and/or humidity may fall outside the requirements of the standard. Such changes have not been shown to affect the validity of the results. Details of the ambient conditions at time of test are available on request.

TECHNICAL REPORT

BS EN 16121:2013 Non-Domestic Storage Furniture – Requirements for Safety, Strength, Durability and Stability

The tests required were carried out in accordance with the standard. Where applicable details of the loads applied and their positions of application are retained at FIRA International and are available on request. Structural testing machines are set to operate at the tolerances stated in the standard. Uncertainty of Measurement calculations have not been applied. FIRA International Uncertainty of Measurement values are available on request.

Item: Ryno Chest

Initial Inspection: No apparent faults

Clause	Test	Result
5.7	**ANNEX A – Modifications for Schools, Kindergartens and Similar Applications**	
A.2.2	Sheer and squeeze points.	N/A
A.2.3	Safety principles.	N/A
A.2.4	General safety.	N/A
A.2.5	Sheer and squeeze points under the influence of powered mechanisms.	N/A
A.2.6	Sheer and squeeze points during use.	N/A
A.2.7	Glass.	N/A
A.2.8	Stability.	N/A
A.2.9	Strength and durability – drop test for trays.	N/A
A.3	Finger entrapment	N/A

In extreme weather conditions the ambient test temperature and/or humidity may fall outside the requirements of the standard. Such changes have not been shown to affect the validity of the results. Details of the ambient conditions at time of test are available on request.

TECHNICAL REPORT

CONCLUSION

The Ryno Chest, as previously described, successfully satisfied the selected Deflection of Shelves test requirement of BS EN 16121: 2013 Test Level 2.

Tested by:	J Viccars
Reported by:	G Wright
Approved by:	L Haines
	Section Head - Structural Testing

Photo 1 - Ryno Chest

Photo 2 - Ryno Chest

**********End of Report**********