

Technical Report

Title: Impact resistance testing of the Barracuda brick slip system

Report No: N950-22-18403



Technical Report

Title: Impact resistance testing of the Barracuda brick slip system

Customer: James & Taylor Ltd,
Sixty-Two, Barwell Business Park,
Leatherhead Road, Chessington, Surrey KT9 2NY.

Issue date: 7 February 2024

VTC job no.: TR0220-3WK2

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Checked by: N. McDonald – Manager



Authorised by: S. R. Moxon – Operations Director



Distribution: 1 copy to James & Taylor
(confidential) 1 copy to project file

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1 INTRODUCTION

This report describes tests carried out at VINCI Technology Centre UK Limited at the request of James & Taylor Limited.

The test sample consisted of a brick slip system supplied by James & Taylor.

The tests were carried out on 19 October 2022 and were to determine the impact resistance of the test sample. The test methods were in accordance with the CWCT Standard Test Methods TN 75/76.

This test report relates only to the actual sample as tested and described herein.

The results are valid only for sample(s) tested and the conditions under which the tests were conducted.

The long-term durability of the façade system is not assessed by these test methods.

VINCI Technology Centre UK Limited is accredited to ISO/IEC 17025:2017 by the United Kingdom Accreditation Service as UKAS Testing Laboratory No. 0057 for a schedule of tests. Tests listed above and marked with an asterisk are not on our schedule.

VINCI Technology Centre UK Limited is Approved Body No. 1766.

VINCI Technology Centre UK Limited is certified by BSI for:

- ISO 9001 Quality Management System,
- ISO 14001 Environmental Management System,
- ISO 45001 Occupational Health and Safety Management System.

The tests were witnessed by John Champion of James & Taylor.

2 CLASSIFICATION OF TEST RESULTS

TABLE 1

Test	Standard	Classification / Declared value
Impact resistance	CWCT TN76	<p><u>Soft body</u></p> <p>Class 1 – serviceability/120 J Negligible risk – safety/350 J & 500 J</p> <p><u>Hard body</u></p> <p>Class 1 – serviceability/3 J, 6 J & 10 J Negligible risk – safety/3 J & 10 J</p>

3 DESCRIPTION OF TEST SAMPLE

3.1 GENERAL ARRANGEMENT

The sample was as shown in the photo below and the drawings included as an appendix to this report.

The test sample was mounted on a rigid test rig with support steelwork designed to simulate the on-site/project conditions. Representatives of James & Taylor installed the sample on the test rig.

The test sample comprised 9 different brick slip types.

TABLE 2

Brick Types Selected for Independent Testing	
Brick Type No.	Brick Type
1	Wienerberger Sandalwood Yellow Multi
2	Michelmersh Charnwood Light Victorian Red
3	Ibstock Leicester Red Stock
4	Ibstock Chesterton Multi Red Smooth
5	Blockley Windermere Grey Solid
6	Wienerberger Olde Ivory Stock
7	Wienerberger Smeed Dean London Stock
8	Ibstock Aldridge Anglian Red Multi Rustic
9	Michelmersh Hadley Brindle Wirecut

PHOTO 45141

TEST SAMPLE ELEVATION



4 IMPACTORS

4.1 SOFT BODY

The soft body impactor shall comprise a canvas spherical/conical bag 400 mm in diameter filled with 3 mm diameter glass spheres with a total mass of approximately 50 kg suspended from a cord at least 3 m long.

PHOTO 4016

SOFT BODY IMPACTOR

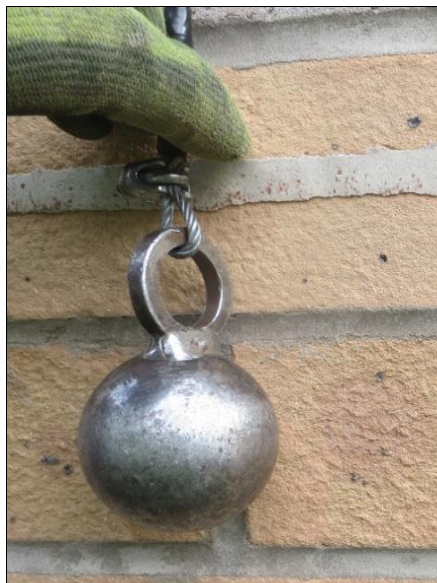


4.2 HARD BODY

The hard body impactor was a solid steel ball of 50 mm or 62.5 mm diameter and approximate mass of 0.5 kg or 1.0 kg.

PHOTO 4047

HARD BODY IMPACTOR



5 PROCEDURES

5.1 SOFT BODY

The impactor almost touched the face of the sample when at rest. It was swung in a pendular movement to hit the sample normal to its face. The test was performed at the locations shown in Figure 1. The impact energies were 120 J for serviceability and 350 J and 500 J for safety.

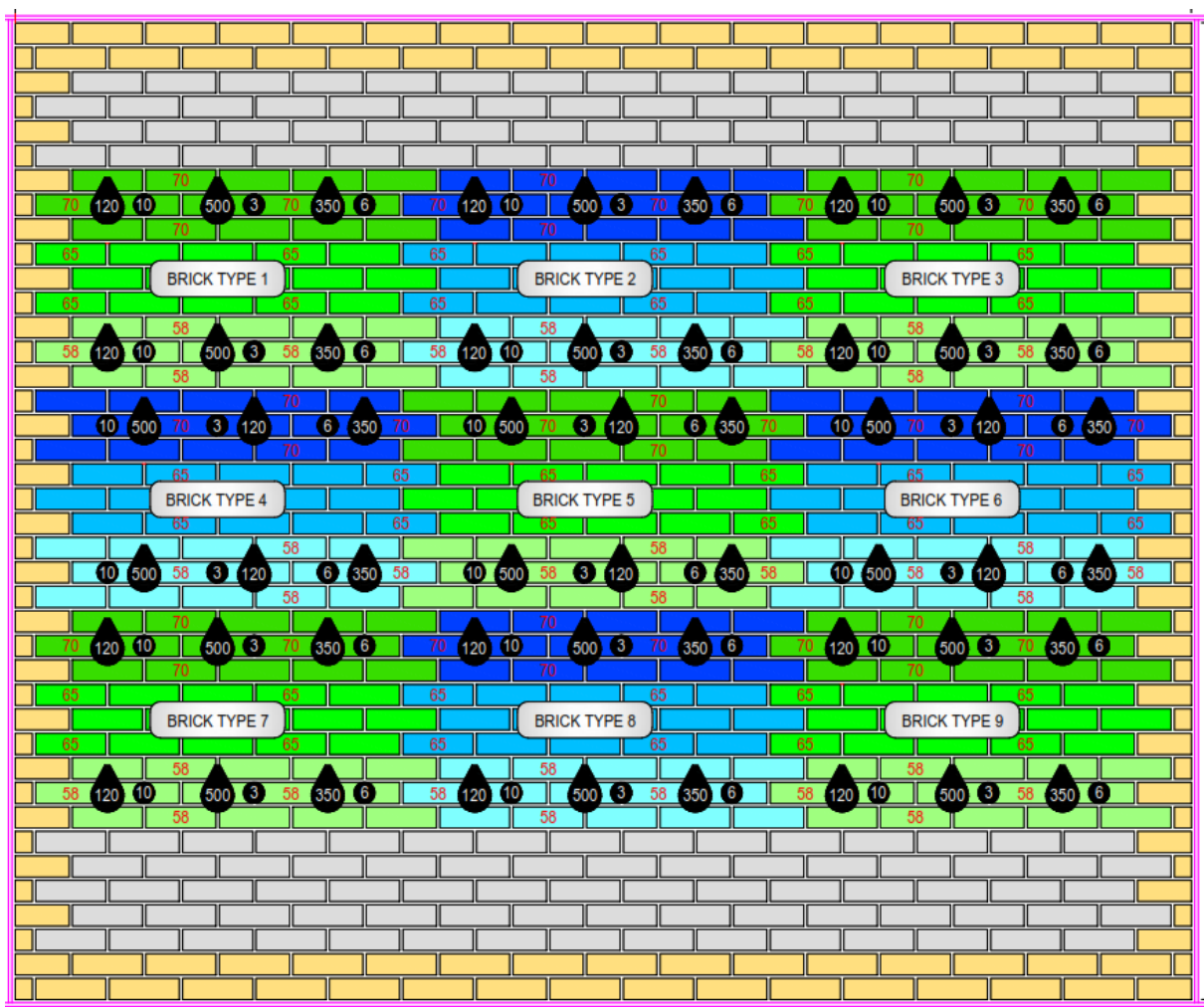
5.2 HARD BODY

The impactor almost touched the face of the sample when at rest. It was swung in a pendular movement to hit the sample normal to its face. The test was performed at the locations shown in Figure 1. The impact energies were 3 J, 6 J and 10 J for serviceability and 3 J and 10 J for safety.

FIGURE 1

IMPACT TEST LOCATIONS

External View



6 PASS/FAIL CRITERIA

Note: Tables 1 to 2 are taken from CWCT TN76.

Table 1 - Classes for serviceability performance

Class	Definition	Explanation/Examples
1	No damage.	No damage visible from 1m, and Any damage visible from closer than 1m unlikely to lead to significant deterioration.
2	Surface damage of an aesthetic nature which is unlikely to require remedial action.	Dents or distortion of panels not visible from more than 5m (note visibility of damage will depend on surface finish and lighting conditions – damage will generally be more visible on reflective surfaces), and Any damage visible from closer than 5m unlikely to lead to significant deterioration.
3	Damage that may require remedial action or replacement of components to maintain appearance or long term performance but does not require immediate action.	Dents or distortion of panels visible from more than 5m, or Spalling of edges of panels of brittle materials, or Damage to finishes that may lead to deterioration of the substrate.
4	Damage requiring immediate action to maintain appearance or performance. Remedial action may include replacement of a panel but does not require dismantling or replacement of supporting structure.	Significant cracks in brittle materials e.g. cracks that may lead to parts of tile falling away subsequent to test, or Fracture of panels causing significant amounts of material to fall away during test.
5	Damage requiring more extensive replacement than 4.	Buckling of support rails.

Table 2 - Classes for safety performance

Class	Explanation/examples
Negligible risk	No material dislodged during test, and No damage likely to lead to materials falling subsequent to test, and No sharp edges produced that would be likely to cause severe injury to a person during impact, and Cladding not penetrated by impactor.
Low risk	Maximum mass of falling particle 50g, and Maximum mass of particle that may fall subsequent to impact 50g, and No sharp edges produced that would be likely to cause severe injury during impact.
Moderate risk	Maximum mass of falling particle less than 500g, and Maximum mass of particle that may fall subsequent to impact less than 500g, and Cladding not penetrated by impact, and No sharp edges produced that would be likely to cause severe injury during impact.
High risk	Maximum mass of falling particle greater than 500g, or Cladding penetrated by impact, or Sharp edges produced that would be likely to cause severe injury during impact.

7 TEST RESULTS

Test Date

Date: 19 October 2022

Ambient temperature = 17°C

7.1 BRICK TYPE 1 IMPACT TEST RESULTS

TABLE 3

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper left	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper centre	500	No visible damage	Negligible risk
Lower left	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower centre	500	No visible damage	Negligible risk

TABLE 4

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	No visible damage	Class 1/Negligible risk
Upper right	6	Small mark	Class 1
Upper left	10	Small mark	Class 1/Negligible risk
Lower centre	3	No visible damage	Class 1/Negligible risk
Lower right	6	Small mark	Class 1
Lower left	10	Small mark	Class 1/Negligible risk

PHOTO 4016

BRICK TYPE 1 AFTER IMPACT TESTS



PHOTO 4047

3 J HARD BODY IMPACT



PHOTO 4016

3 J HARD BODY IMPACT



PHOTO 4045

6 J HARD BODY IMPACT



PHOTO 4046

6 J HARD BODY IMPACT

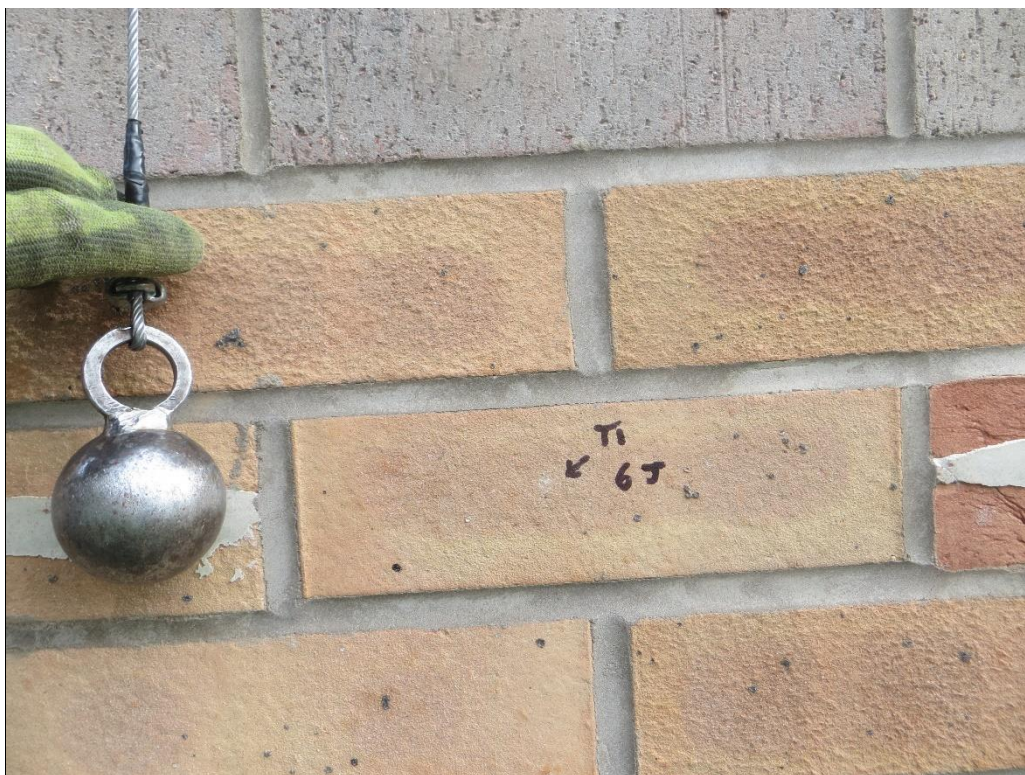


PHOTO 4056

10 J HARD BODY IMPACT



PHOTO 4057

10 J HARD BODY IMPACT



7.2 BRICK TYPE 2 IMPACT TEST RESULTS

TABLE 5

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper left	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper centre	500	No visible damage	Negligible risk
Lower left	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower centre	500	No visible damage	Negligible risk

TABLE 6

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	Small mark	Class 1/Negligible risk
Upper right	6	Small mark	Class 1
Upper left	10	Small mark	Class 1/Negligible risk
Lower centre	3	Small mark	Class 1/Negligible risk
Lower right	6	Small mark	Class 1
Lower left	10	Small mark	Class 1/Negligible risk

PHOTO 4057

BRICK TYPE 2 AFTER IMPACT TESTS



PHOTO 4036

3 J HARD BODY IMPACT

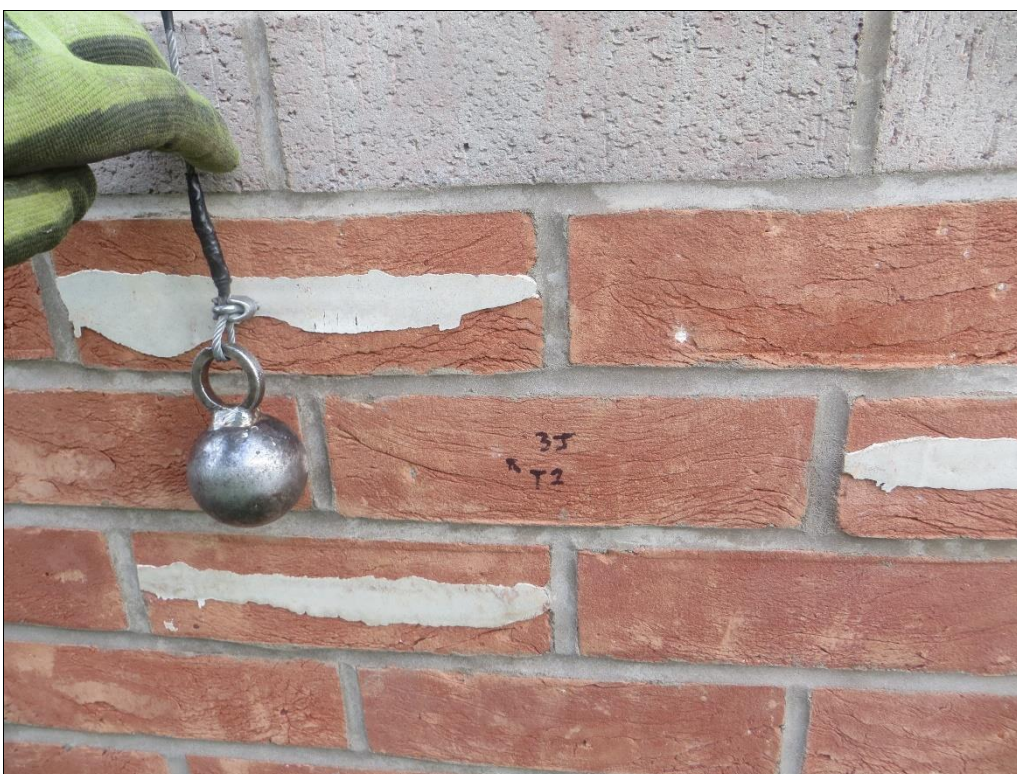


PHOTO 4037

3 J HARD BODY IMPACT



PHOTO 4034

6 J HARD BODY IMPACT



PHOTO 4035

6 J HARD BODY IMPACT



PHOTO 4058

10 J HARD BODY IMPACT



PHOTO 4059

10 J HARD BODY IMPACT



7.3 BRICK TYPE 3 IMPACT TEST RESULTS

TABLE 7

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper left	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper centre	500	No visible damage	Negligible risk
Lower left	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower centre	500	No visible damage	Negligible risk

TABLE 8

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	Small mark	Class 1/Negligible risk
Upper right	6	Small mark	Class 1
Upper left	10	Small mark	Class 1/Negligible risk
Lower centre	3	Small mark	Class 1/Negligible risk
Lower right	6	Small mark	Class 1
Lower left	10	Small mark	Class 1/Negligible risk

PHOTO 5719

BRICK TYPE 3 AFTER IMPACT TESTS

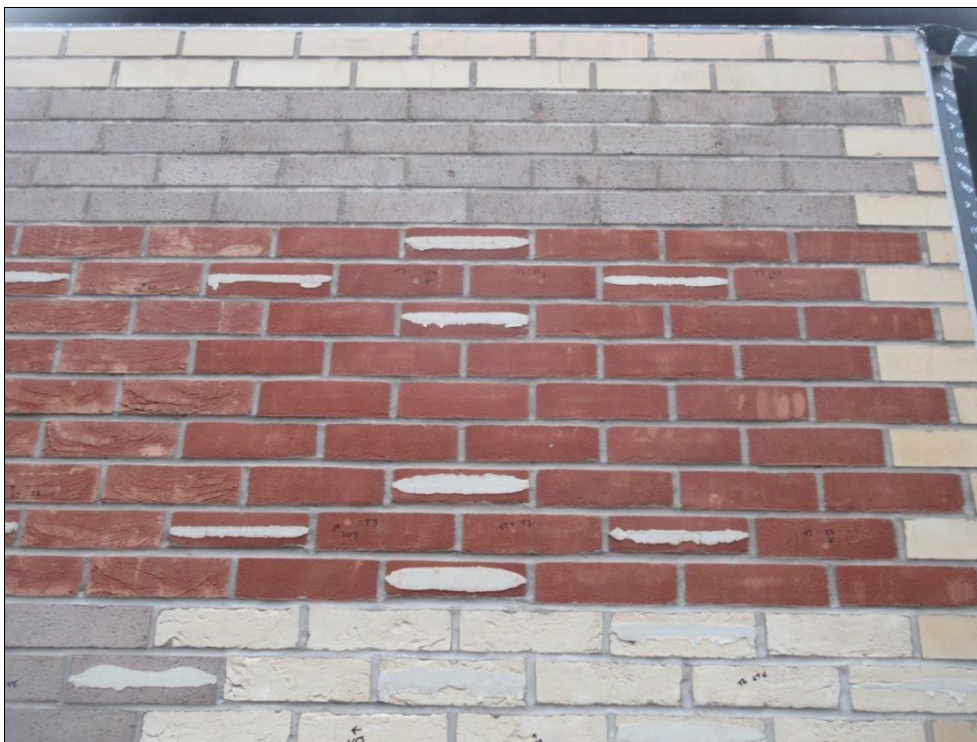


PHOTO 4025

3 J HARD BODY IMPACT



PHOTO 4026

3 J HARD BODY IMPACT



PHOTO 4023

6 J HARD BODY IMPACT



HOTO 4024

6 J HARD BODY IMPACT



PHOTO 4066

10 J HARD BODY IMPACT



PHOTO 4067

10 J HARD BODY IMPACT



7.4 BRICK TYPE 4 IMPACT TEST RESULTS

TABLE 9

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper left	500	No visible damage	Negligible risk
Lower centre	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower left	500	No visible damage	Negligible risk

TABLE 10

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	No visible damage	Class 1/Negligible risk
Upper right	6	No visible damage	Class 1
Upper left	10	Small mark	Class 1/Negligible risk
Lower centre	3	No visible damage	Class 1/Negligible risk
Lower right	6	No visible damage	Class 1
Lower left	10	Small mark	Class 1/Negligible risk

PHOTO 5716

BRICK TYPE 4 AFTER IMPACT TESTS



PHOTO 4048

3 J HARD BODY IMPACT



PHOTO 5722

3 J HARD BODY IMPACT



PHOTO 4044

6 J HARD BODY IMPACT



PHOTO 5726

6 J HARD BODY IMPACT



PHOTO 4054

10 J HARD BODY IMPACT



PHOTO 4055

10 J HARD BODY IMPACT



7.5 BRICK TYPE 5 IMPACT TEST RESULTS

TABLE 11

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper left	500	No visible damage	Negligible risk
Lower centre	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower left	500	No visible damage	Negligible risk

TABLE 12

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	Small mark	Class 1/Negligible risk
Upper right	6	Small mark	Class 1
Upper left	10	Small chip	Class 1/Negligible risk
Lower centre	3	Small mark	Class 1/Negligible risk
Lower right	6	Small mark	Class 1
Lower left	10	Small mark	Class 1/Negligible risk

PHOTO 5715

BRICK TYPE 5 AFTER IMPACT TESTS



PHOTO 4038

3 J HARD BODY IMPACT



PHOTO 4039

3 J HARD BODY IMPACT



PHOTO 4032

6 J HARD BODY IMPACT

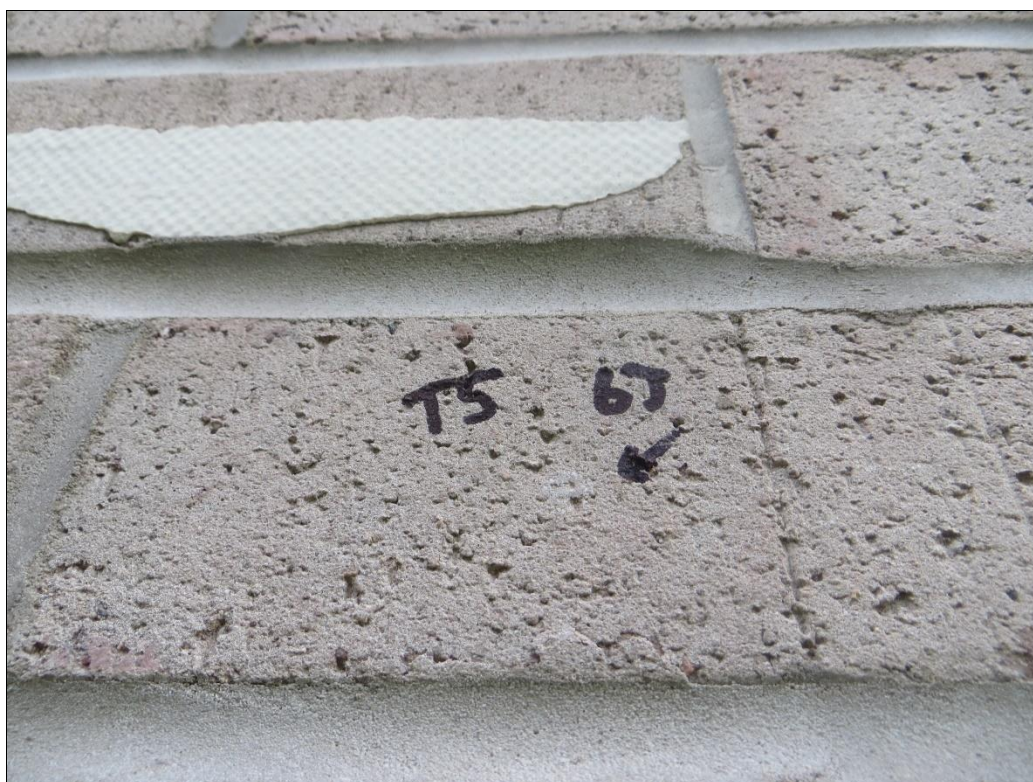


PHOTO 4033

6 J HARD BODY IMPACT



PHOTO 4060

10 J HARD BODY IMPACT



PHOTO 4061

10 J HARD BODY IMPACT



7.6 BRICK TYPE 6 IMPACT TEST RESULTS

TABLE 13

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper left	500	No visible damage	Negligible risk
Lower centre	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower left	500	No visible damage	Negligible risk

TABLE 14

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	Small mark	Class 1/Negligible risk
Upper right	6	Small mark	Class 1
Upper left	10	Small mark	Class 1/Negligible risk
Lower centre	3	Small mark	Class 1/Negligible risk
Lower right	6	Small mark	Class 1
Lower left	10	Small mark	Class 1/Negligible risk

PHOTO 5714

BRICK TYPE 6 AFTER IMPACT TESTS



PHOTO 4027

3 J HARD BODY IMPACT



PHOTO 4028

3 J HARD BODY IMPACT



PHOTO 4021

6 J HARD BODY IMPACT



PHOTO 4022

6J HARD BODY IMPACT

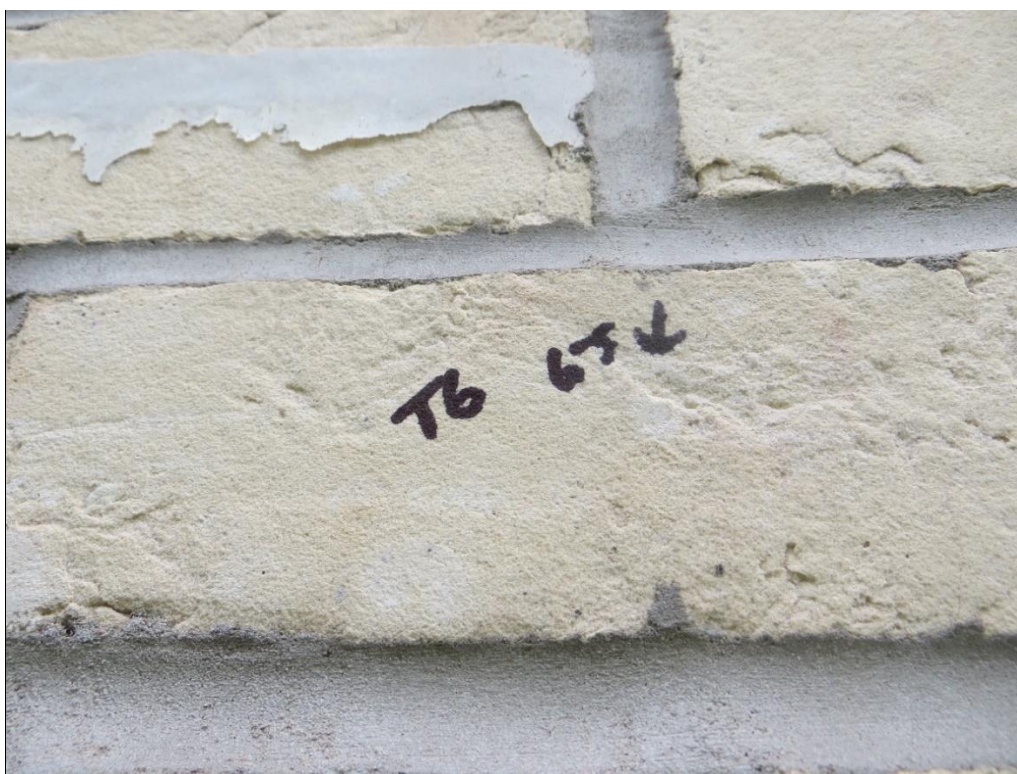


PHOTO 4068

10 J HARD BODY IMPACT

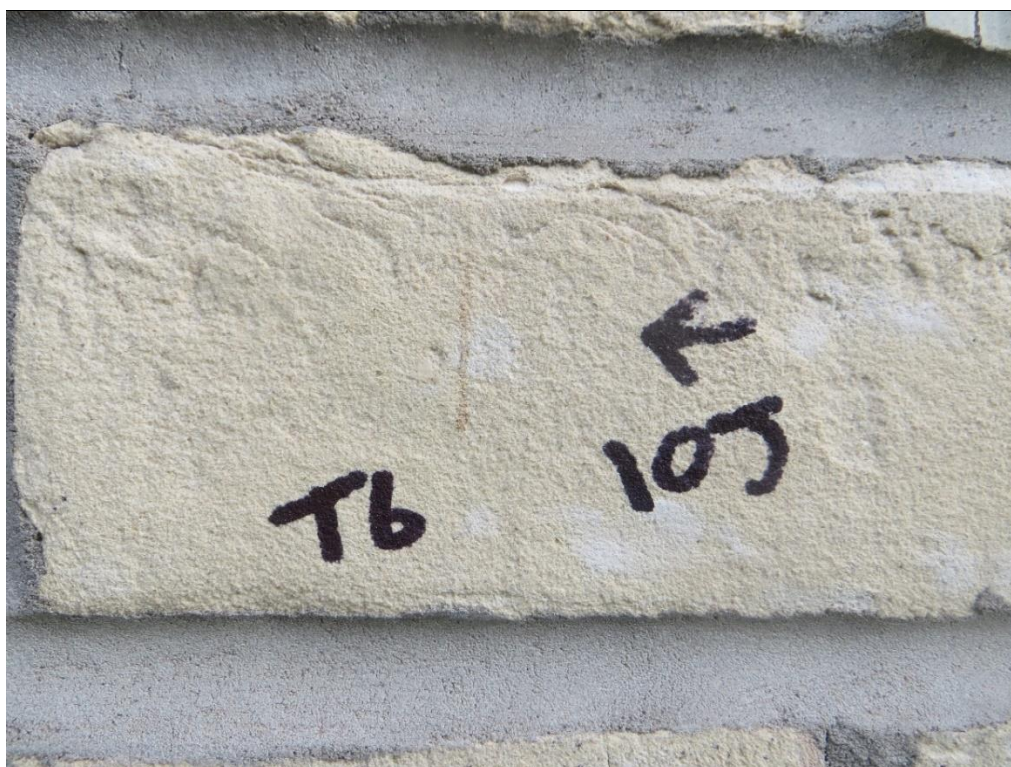
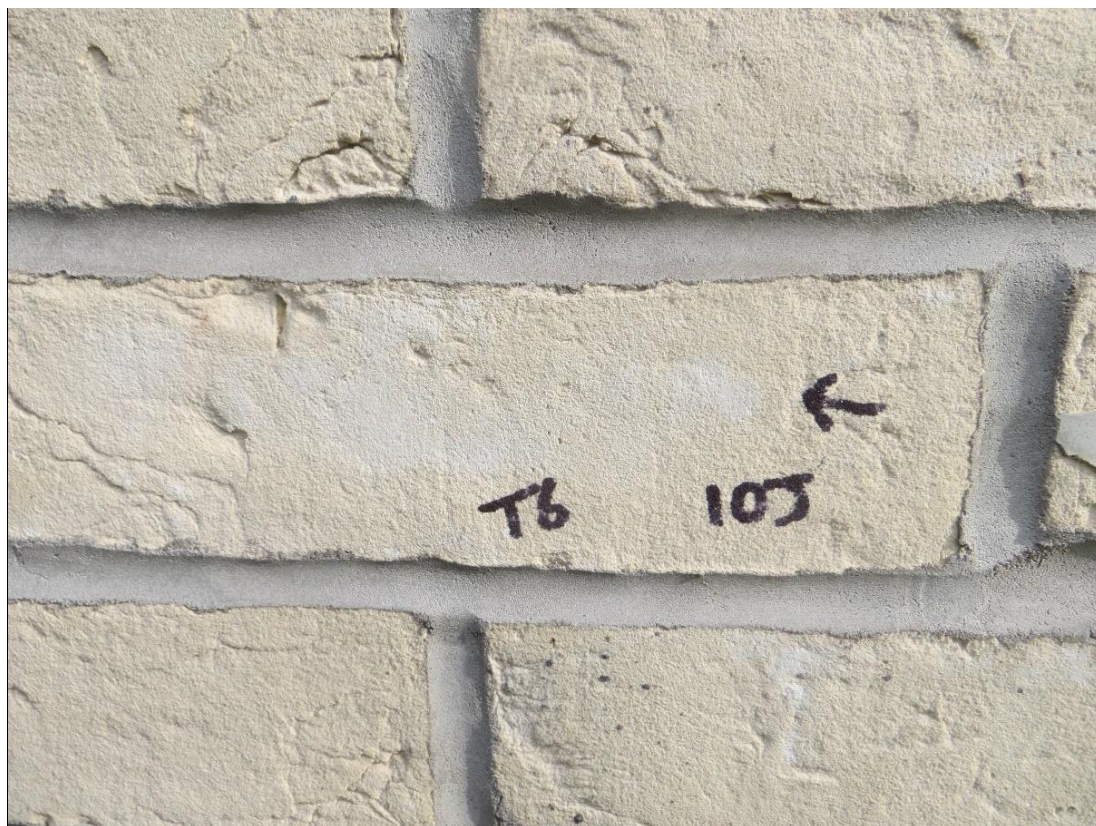


PHOTO 4070

10 J HARD BODY IMPACT



7.7 BRICK TYPE 7 IMPACT TEST RESULTS

TABLE 15

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper left	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper centre	500	No visible damage	Negligible risk
Lower left	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower centre	500	No visible damage	Negligible risk

TABLE 16

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	Small mark	Class 1/Negligible risk
Upper right	6	Small mark	Class 1
Upper left	10	Small mark	Class 1/Negligible risk
Lower centre	3	Small mark	Class 1/Negligible risk
Lower right	6	Small mark	Class 1
Lower left	10	Small mark	Class 1/Negligible risk

PHOTO 5711

BRICK TYPE 7 AFTER IMPACT TESTS



PHOTO 4049

3 J HARD BODY IMPACT



PHOTO 4050

3 J HARD BODY IMPACT

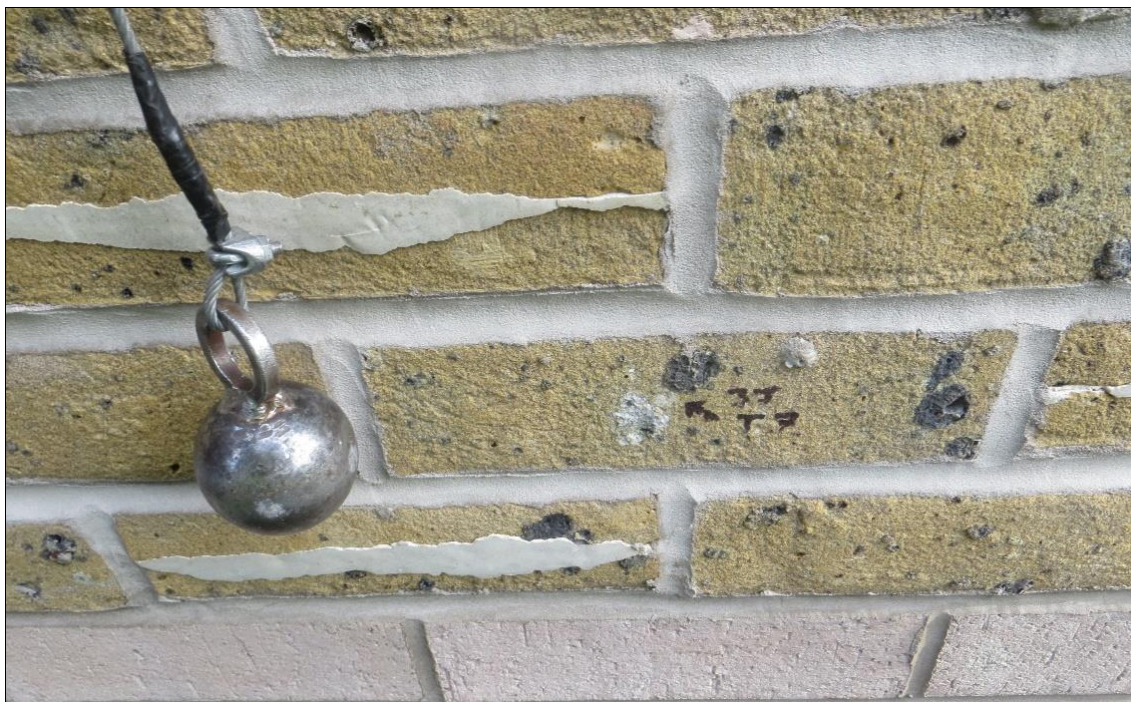


PHOTO 4042

6 J HARD BODY IMPACT



PHOTO 4043

6 J HARD BODY IMPACT



PHOTO 4052

10 J HARD BODY IMPACT



PHOTO 4053

10 J HARD BODY IMPACT



7.8 BRICK TYPE 8 IMPACT TEST RESULTS

TABLE 17

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper left	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper centre	500	No visible damage	Negligible risk
Lower left	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower centre	500	No visible damage	Negligible risk

TABLE 18

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	Small mark	Class 1/Negligible risk
Upper right	6	Small mark	Class 1
Upper left	10	No visible damage	Class 1/Negligible risk
Lower centre	3	Small mark	Class 1/Negligible risk
Lower right	6	Small mark	Class 1
Lower left	10	No visible damage	Class 1/Negligible risk

PHOTO 5712

BRICK TYPE 8 AFTER IMPACT TESTS

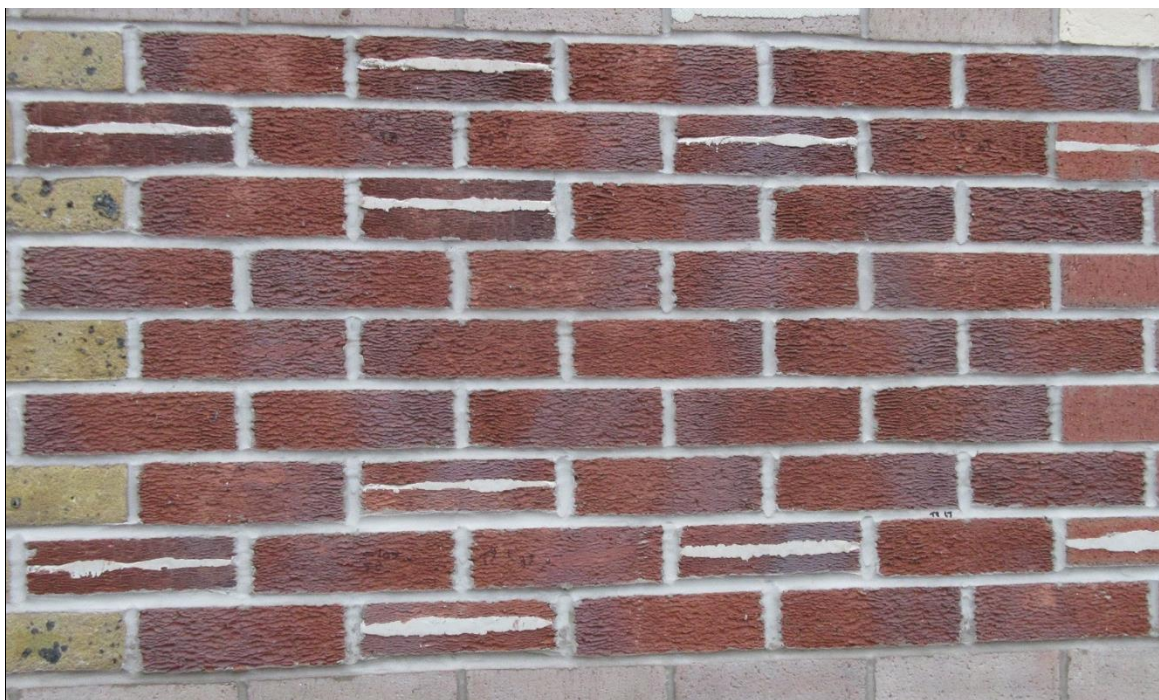


PHOTO 4040

3 J HARD BODY IMPACT

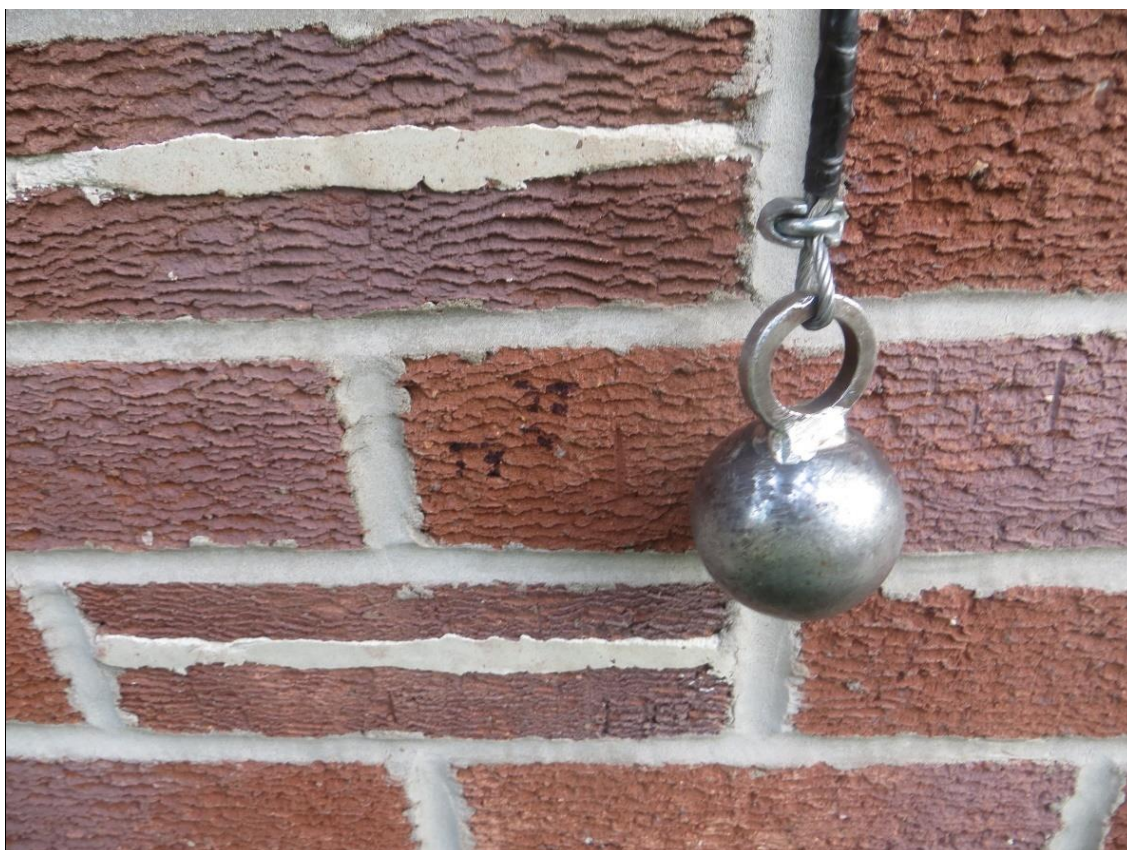


PHOTO 4041

3 J HARD BODY IMPACT



PHOTO 4030

6 J HARD BODY IMPACT



PHOTO 4031

6 J HARD BODY IMPACT



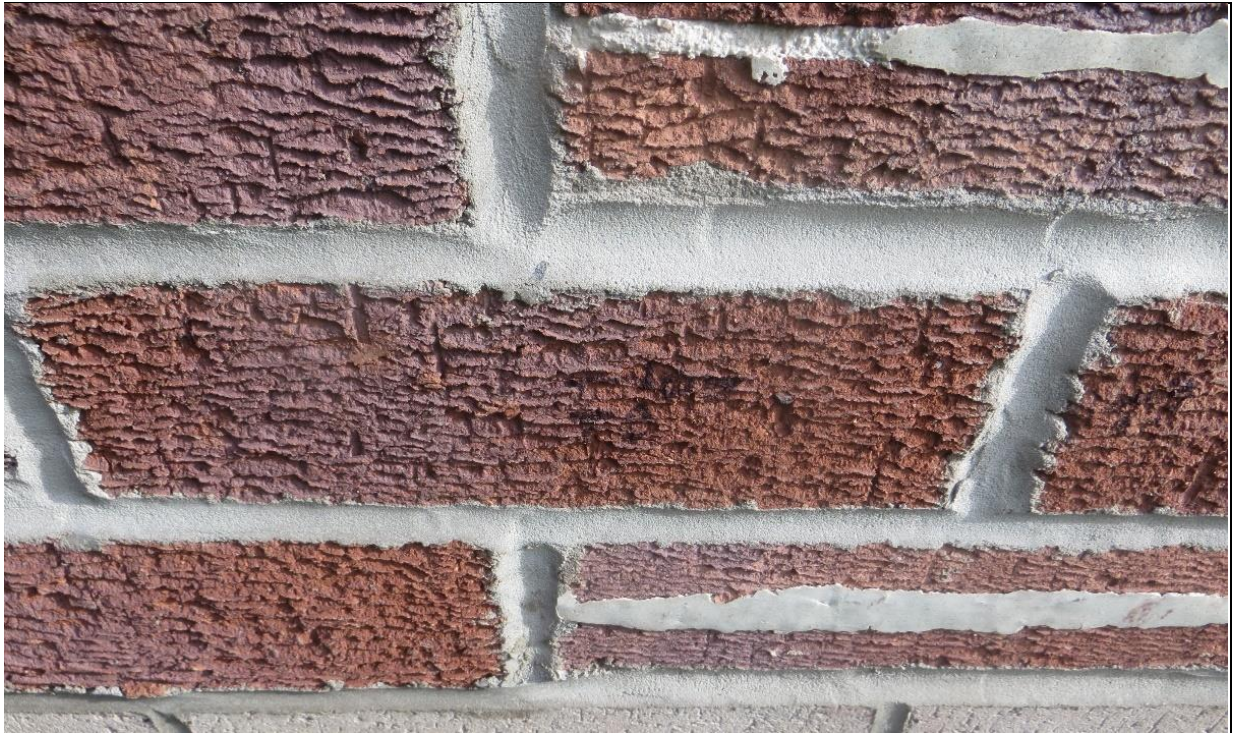
PHOTO 4063

10 J HARD BODY IMPACT



PHOTO 4064

10 J HARD BODY IMPACT



7.9 BRICK TYPE 9 IMPACT TEST RESULTS

TABLE 19

SOFT BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper left	120 x 3	No visible damage	Class 1
Upper right	350	No visible damage	Negligible risk
Upper centre	500	No visible damage	Negligible risk
Lower left	120 x 3	No visible damage	Class 1
Lower right	350	No visible damage	Negligible risk
Lower centre	500	No visible damage	Negligible risk

TABLE 20

HARD BODY IMPACT TEST RESULTS

Location	Impact energy (J)	Observations	Classification
Upper centre	3	Small mark	Class 1/Negligible risk
Upper right	6	Small mark	Class 1
Upper left	10	Small mark	Class 1/Negligible risk
Lower centre	3	Small mark	Class 1/Negligible risk
Lower right	6	Small mark	Class 1
Lower left	10	Small mark	Class 1/Negligible risk

PHOTO 5713

BRICK TYPE 9 AFTER IMPACT TESTS



PHOTO 4018

3 J HARD BODY IMPACT



PHOTO 4029

3 J HARD BODY IMPACT



PHOTO 4019

6 J HARD BODY IMPACT



PHOTO 4020

6 J HARD BODY IMPACT



PHOTO 4071

10 J HARD BODY IMPACT



PHOTO 4072

10 J HARD BODY IMPACT



7.10 CONTROLLED DISMANTLING

During the dismantling of the sample no discrepancies from the drawings were found.

PHOTO 6137

TEST SAMPLE DURING DISMANTLE



PHOTO 6145

TEST SAMPLE DURING DISMANTLE



PHOTO 6156

TEST SAMPLE DURING DISMANTLE



PHOTO 6157

TEST SAMPLE DURING DISMANTLE

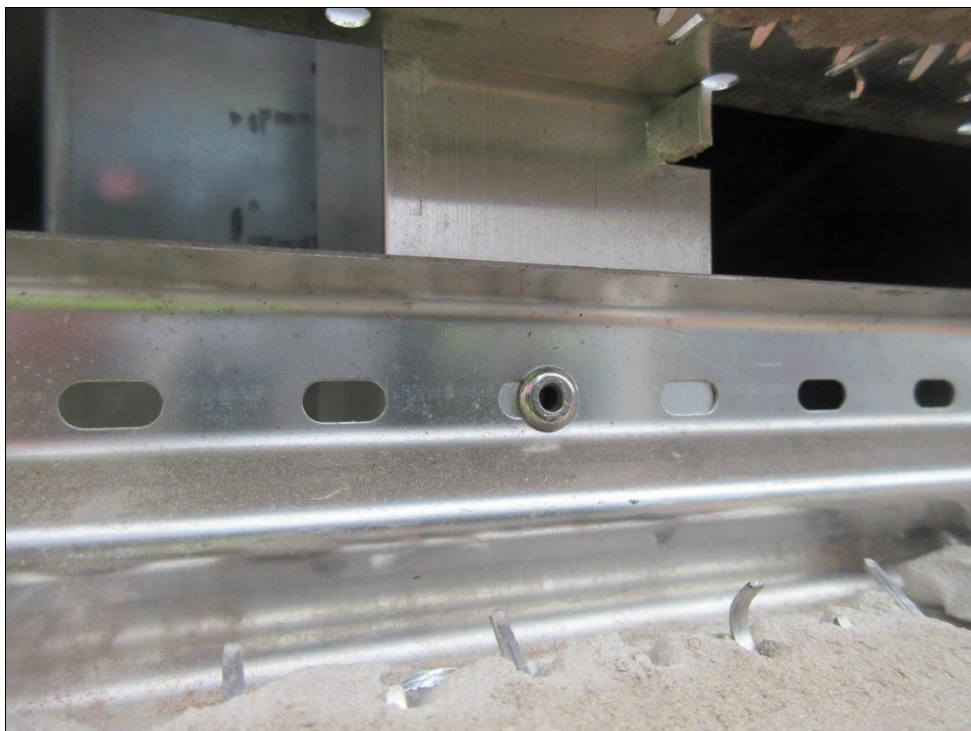


PHOTO 6158

TEST SAMPLE DURING DISMANTLE



PHOTO 6159

TEST SAMPLE DURING DISMANTLE

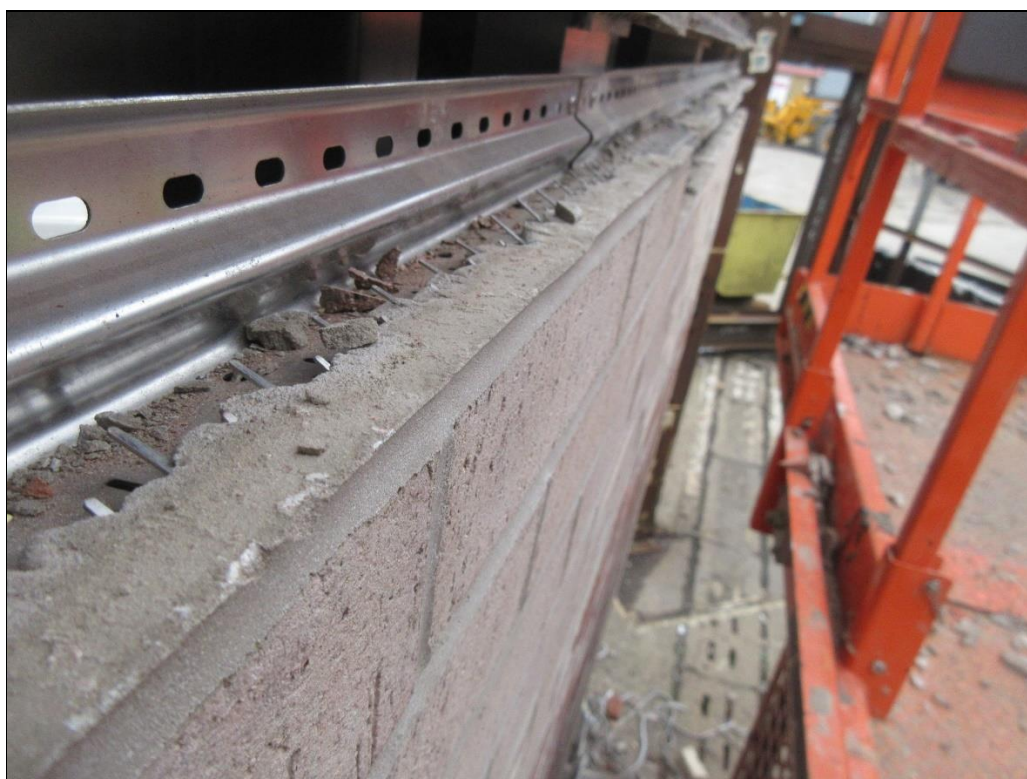


PHOTO 6160

BRICK SLIPS REMOVED FROM TEST RIG



PHOTO 6181

SUPPORT FRAME REMOVED FROM TEST RIG



8 APPENDIX - DRAWINGS

The following 4 unnumbered pages are copies of James & Taylor Limited drawings numbered:

BSS-TRA-GA-001,

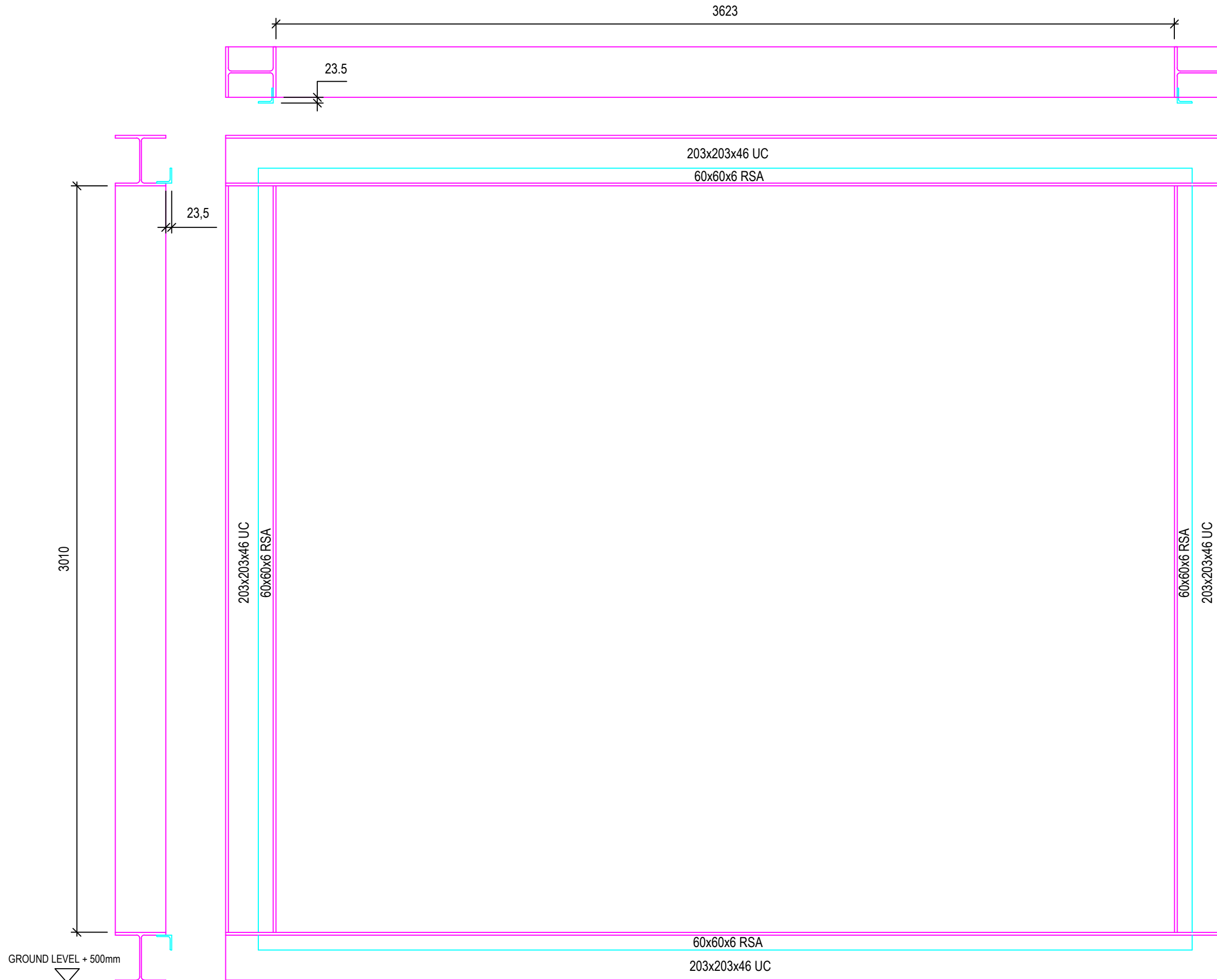
BSS-TRA-GA-002,

BSS-TRA-GA-003,

BSS-TRA-T4-Rev B.

END OF REPORT

TEST RIG TYPE A STEEL FRAMING (TO BE PROVIDED BY TECHNOLOGY CENTRE)



GENERAL NOTES:

DO NOT SCALE FROM THIS DRAWING.

THIS DRAWING IS TO BE READ IN CONJUNCTION
WITH ALL RELEVANT JAMES & TAYLOR,
ARCHITECT'S AND ENGINEER'S DRAWINGS.

STEEL FRAMING REQUIREMENT

203x203x46 UC (AS DRAWN)

60x60x6 RSA (AS DRAWN)

REVISIONS: DATE:

CLIENT:
JAMES & TAYLOR LTD

PROJECT:
BRICK SLIP SYSTEM

TITLE:
**TEST RIG TYPE A
GENERAL ARRANGEMENT**

DATE:
03/12/2021

DRAWN BY: CHECKED BY:
JSC JSC

SCALE: PLOT SIZE:
1:16 A3

DRAWING NUMBER: REVISION:
BSS-TRA-GA-001

PLOT DATE:
December 5, 2021 5:34 PM © James & Taylor Ltd - 2009

TEST RIG TYPE A
METSEC BACKING WALL; STUDWORK, BASE, AND HEAD TRACK SETTING OUT/CONFIGURATION



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Chessington, Surrey KT9 2NY
T. 020 8942 3688 F. 020 8336 2036 E. info@jamesandtaylor.co.uk
www.jamesandtaylor.co.uk

GENERAL NOTES:

DO NOT SCALE FROM THIS DRAWING.

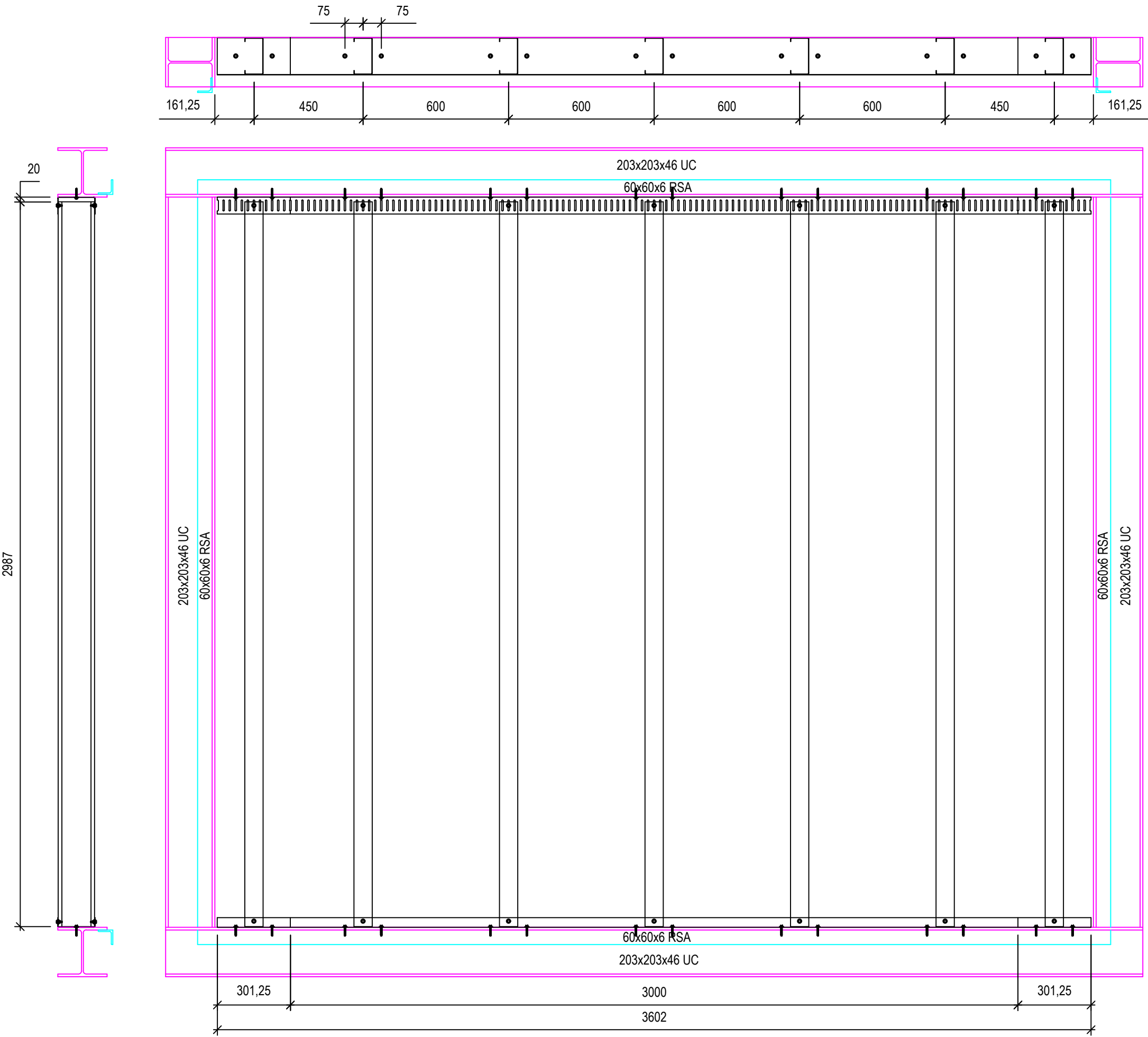
THIS DRAWING IS TO BE READ IN CONJUNCTION
WITH ALL RELEVANT JAMES & TAYLOR,
ARCHITECT'S AND ENGINEER'S DRAWINGS.

METSEC REQUIREMENT

VERTICAL STUDS
150M12-75 (THEORETICAL LENGTH 2987mm) = 7 No.

BASE TRACK
154M12-40 (THEORETICAL LENGTH 3602mm) = 1 No.

HEAD TRACK
154M16-70s (THEORETICAL LENGTH 3602mm) = 1 No.



REVISIONS: _____ DATE: _____
CLIENT: _____
JAMES & TAYLOR LTD

PROJECT: _____
BRICK SLIP SYSTEM

TITLE: _____
**TEST RIG TYPE A
GENERAL ARRANGEMENT**

DATE: _____
03/12/2021

DRAWN BY: _____ CHECKED BY: _____
JSC JSC

SCALE: _____ PLOT SIZE: _____
1:16 A3

DRAWING NUMBER: _____ REVISION: _____
BSS-TRA-GA-002

PLOT DATE: _____
January 16, 2022 6:18 PM © James & Taylor Ltd - 2009

TEST RIG TYPE A
'HELPING HAND' BRACKET, VERTICAL SUB-STRUCTURE AND BARRACUDA RAIL SETTING OUT/CONFIGURATION



GENERAL NOTES:

DO NOT SCALE FROM THIS DRAWING.

THIS DRAWING IS TO BE READ IN CONJUNCTION
WITH ALL RELEVANT JAMES & TAYLOR,
ARCHITECT'S AND ENGINEER'S DRAWINGS.

BARRACUDA HORIZONTAL RAIL REQUIREMENT

BAR-R1-1800 = 78 No.
BAR-R2-1800 = 2 No.
BAR-R3-1800 = 2 No.

BARRACUDA VERTICAL RAIL REQUIREMENT

BAR-VL1-2990 = 6 No.
BAR-VT1-2990 = 1 No.

'HELPING HAND' BRACKET REQUIREMENT
Envelope 90 (ADJUSTMENT RANGE 92mm TO 132mm)

VERTICAL LOAD BEARING HELPING HAND = 7 No.
RESTRAIN HELPING HAND = 28 No.

REVISIONS: _____ DATE: _____

CLIENT:
JAMES & TAYLOR LTD

PROJECT:
BRICK SLIP SYSTEM

TITLE:
TEST RIG TYPE A
GENERAL ARRANGEMENT

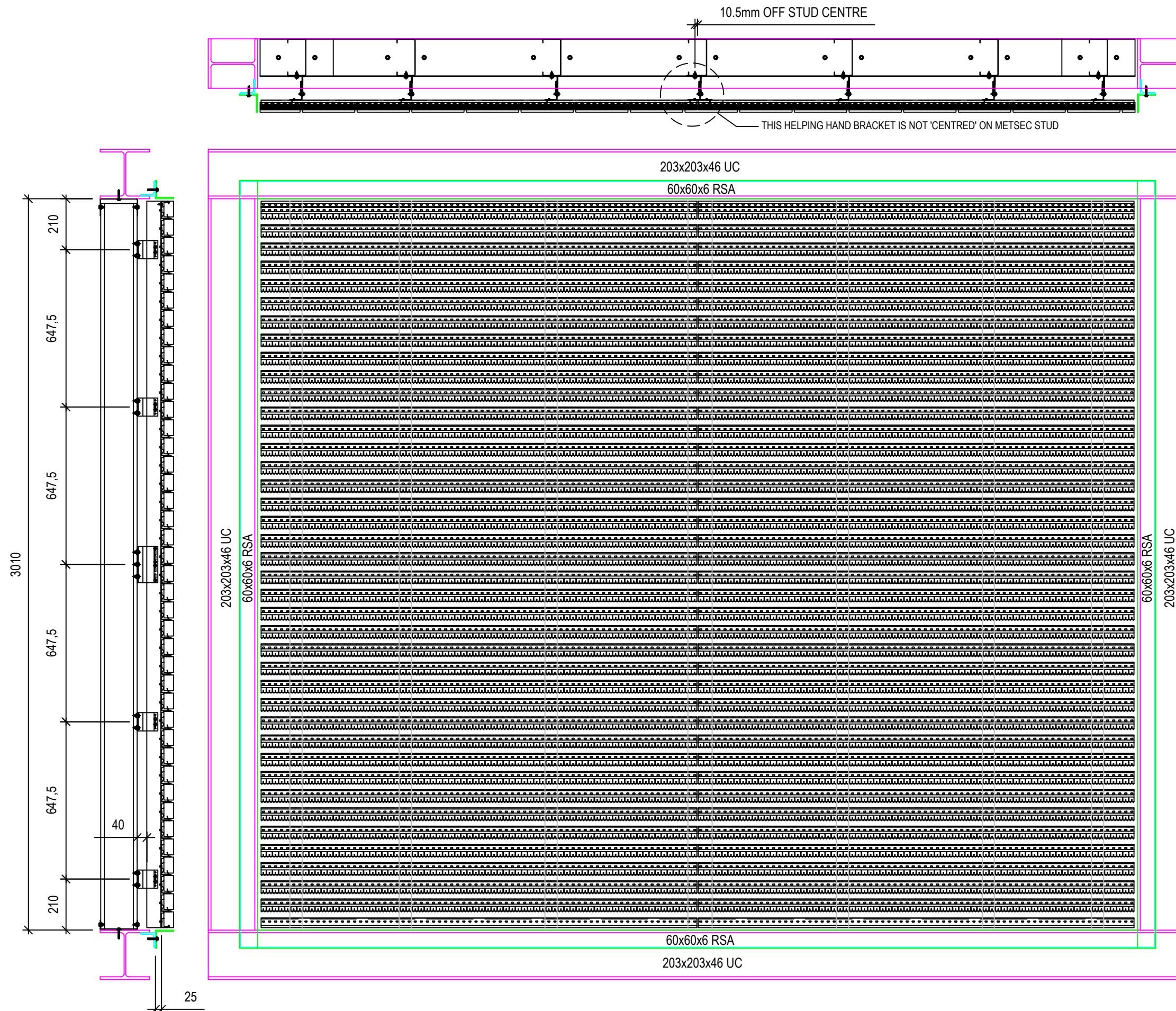
DATE:
03/12/2021

DRAWN BY: JSC CHECKED BY: JSC

SCALE: 1:16 PLOT SIZE: A3

DRAWING NUMBER: **BSS-TRA-GA-003** REVISION:

PLOT DATE:
January 16, 2022 6:56 PM © James & Taylor Ltd - 2009



TEST RIG TYPE A - TEST 4 [MORTARED IMPACT]



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GENERAL NOTES:

DO NOT SCALE FROM THIS DRAWING.

THIS DRAWING IS TO BE READ IN CONJUNCTION
WITH ALL RELEVANT JAMES & TAYLOR,
ARCHITECT'S AND ENGINEER'S DRAWINGS.

= BLOCKLEY WINDERMERE GREY SOLID

215mm LONG 'STANDARD' SLIPS = 135 No.

= WIENERBERGER STAFFORDSHIRE
SMOOTH CREAM

215mm LONG 'STANDARD' SLIPS = 30 No.

165mm LONG 'STANDARD' SLIPS = 38 No.

52mm LONG 'STANDARD' SLIPS = 38 No.

215mm LONG SLIPS WITH 'TOP' REBATE = 15 No.

215mm LONG SLIPS WITH 'BOTTOM' REBATE = 15 No.

165mm LONG SLIPS WITH 'TOP' REBATE = 1 No.

165mm LONG SLIPS WITH 'BOTTOM' REBATE = 1 No.

52mm LONG SLIPS WITH 'TOP' REBATE = 1 No.

52mm LONG SLIPS WITH 'BOTTOM' REBATE = 1 No.

Rev B	DRAWING RENAMED	JSC	11/11/2022
Rev A	IMPACT LOCATIONS ADDED	JSC	15/10/2022

REVISIONS: DATE:

CLIENT:
JAMES & TAYLOR LTD

PROJECT:
BRICK SLIP SYSTEM

TITLE:
**TEST RIG TYPE A - TEST 4
MORTARED IMPACT**

DATE:
04/12/2021

DRAWN BY:	CHECKED BY:
JSC	JSC

SCALE:	PLOT SIZE:
1:16	A3

DRAWING NUMBER:	REVISION:
BSS-TRA-T4	B

PLOT DATE:
November 11, 2022 12:20 PM © James & Taylor Ltd - 2009

IMPACT ENERGIES AND SEQUENCE

SOFT BODY

Impact 1 120 Nm

Impact 2 350 Nm

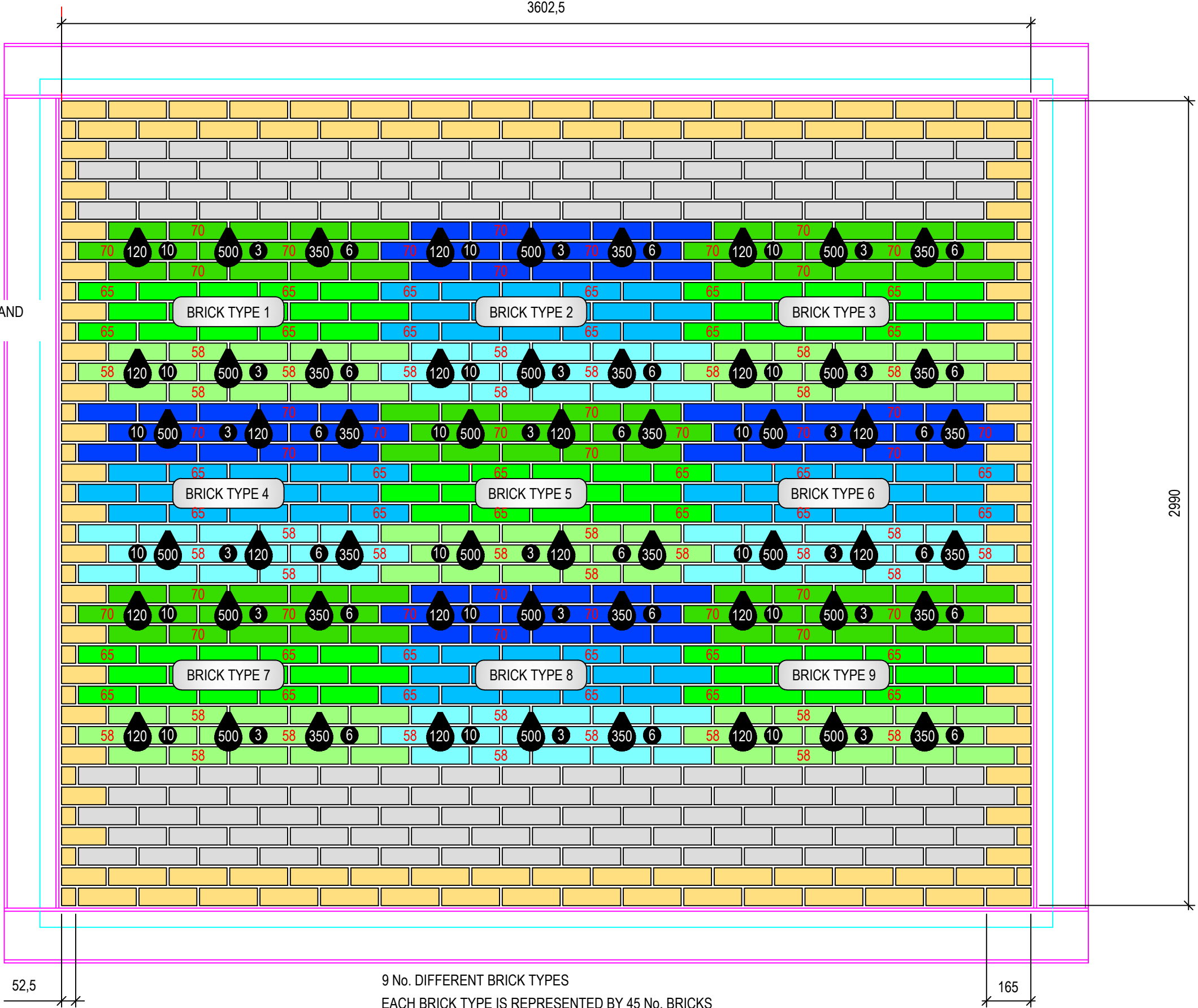
Impact 5 500 Nm

HARD BODY

Impact 3 3 Nm

Impact 4 6 Nm

Impact 6 10 Nm



9 No. DIFFERENT BRICK TYPES
EACH BRICK TYPE IS REPRESENTED BY 45 No. BRICKS
MEDIAN HEIGHT BRICKS = 15 No.
SMALL BRICKS = 4 No. 58mm HIGH AND 11 No. MEDIAN HEIGHT [26.66%]
LARGE BRICKS = 4 No. 70mm HIGH AND 11 No. MEDIAN HEIGHT [26.66%]



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