

LOXO

CLADDING SYSTEMS

30/30/30 & 60/60/60

BOUNDARY FIRE WALLS

TECHNICAL MANUAL

Edition September 2022

(always refer to the latest manual as set out on www.loxocladding.co.nz)

Head Office: Loxo Cladding NZ Limited
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www.loxocladding.co.nz



engineering@tmco.co.nz
Head Office: 03 348 6066

www.tmco.co.nz
T M CONSULTANTS LTD.

File No. 150619

PRODUCER STATEMENT – PS1 - DESIGN

BUILDING CODE CLAUSE(S):	NZBC B1
ISSUED BY:	TM CONSULTANTS LIMITED
TO:	LOXO CLADDING SYSTEMS LIMITED
TO BE SUPPLIED TO:	LOCAL BCA OR TA
IN RESPECT OF:	FIRE RATED GARAGE BOUNDARY WALL WITH OVERHANG AND FIRE RATED BOUNDARY WALL WITH REBATE IN SLAB
AT:	VARIOUS LOCATIONS

We have been engaged by the owner/developer referred to above to provide **STRUCTURAL ENGINEERING** services in respect of the requirements of the Clause(s) of the Building Code specified above for **Part only** as specified in the Schedule of the proposed building work. The design carried out by us has been prepared in accordance with:

<input checked="" type="checkbox"/>	Compliance Documents issued by Ministry of Business, Innovation & Employment Verification Methods B1/VM1 and B1/VM4 and the approved documents of the NZBC, and/or;
<input type="checkbox"/>	Alternative solution as per the attached schedule

The proposed building work covered by this producer statement is described on the drawings specified in the Schedule, together with the specification, and other documents set out in the Schedule.

On behalf of **TM Consultants Limited**, and subject to:

i.	All proprietary products meeting their performance specification requirements.
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I believe on reasonable grounds that:

a.	the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the Schedule, will comply with the relevant provisions of the Building Code and that;
b.	the persons who have undertaken the design have the necessary competency to do so.

I recommend the **CM3** level of **Construction Monitoring**. Construction monitoring site visits required are shown on the Schedule.

I, **Matthew Brian Blyth** am;

CPEng (No: 237435) and hold the following qualifications: BE(Hons) Civil, CMEngNZ, CPEng(Structural), IntPE(NZ)

TM Consultants Ltd in issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000. This Producer Statement - PS1 - Design is valid for a Building Consent application 1 year only from the date of issue.

SIGNED BY  ON BEHALF OF TM Consultants Ltd

DATE: 07 October 2024

Original To: Stufkens & Chambers Architects Ltd <mstufkens@scarchitects.co.nz>

Copy To: Mat Clark <mat@loxocladding.co.nz>

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Engineering Design Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise (including negligence), is limited to the sum of \$200,000.

SCHEDULE to PS1

Documentation

The proposed building work covered by this Producer Statement is described on TM Consultants Limited's documents, drawings, or other supporting materials as listed below;

Drawings titled **Loxo Cladding Systems Ltd's drawings titled Fire Rated Garage Boundary Wall**, dated **20 Mar 2018** and numbered **Sheets F02 rev D, F03 rev D, F04 rev D, F05 rev B, F06 rev A, F17 rev C, F18 rev C, F19 rev C and F20 rev C**

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on the Engineering New Zealand website <https://www.engineeringnz.org/engineer-tools/engineering-documents/producer-statements/>

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN	Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;
PS2 DESIGN REVIEW	Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;
PS3 CONSTRUCTION	Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 2011 ²
PS4 CONSTRUCTION REVIEW	Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.

This must be accompanied by a statement of completion of building work (Schedule 6).

The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional

This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.

The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).

Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.

Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance

As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.

The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase

There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers³). The building Consent Authority is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4

Building Consent Authorities should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the Design Firm's engagement.

Refer Also:

1. Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
2. NZIA Standard Conditions of Contract SCC 2011
3. Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
4. PN01 Guidelines on Producer Statements

www.engineeringnz.org

31 August 2022

Job No: 18013001

Loxo Cladding NZ Limited
Attn Marcus Stufkens

Via email: m.stufkens@loxocladding.co.nz

RE: Loxo 30/30/30 Fire Rated Boundary Wall Systems

Dear Marcus,

Following a review of the testing and assessments completed by Warrington Australia Pty Ltd (Report 38259000 R6.3 and Summary 38259000 SOA6.3) and specific discussions with Hans Gerlich (Technical Manager, Building Systems, Winstone Wallboards Ltd), Engenuity Consulting Engineers Limited conclude that the Loxo Boundary Wall Systems detailed in drawings 'Fire Rated Garage Boundary Wall', sheets F02-F04, revision D, dated 08.04.18 and sheets F17-F20, revision D, dated 19.06.18 will provide a 30/30/30 fire resistance rating in accordance with AS 1530.4:2014

No unrated penetrations are permitted through the GIB or Loxo linings. Where penetrations are required, these shall be fire stopped using an appropriate passive fire stopping medium installed strictly in accordance with the manufacturers requirements for the product used.

Note that this standard detail is not appropriate alone for typical 'side by side' or 'one above another' type terrace housing, and that additional specific fire rated junction/ cavity details are necessary to ensure fire separation between units are achieved.

Take note that this letter does not address the durability or post fire structural stability requirements of the New Zealand Building Code.

Engenuity Consulting Engineers Limited reserves the right at any time to amend or withdraw this letter in the light of new knowledge. In lieu of the above, this letter is valid up to 28 February 2026.

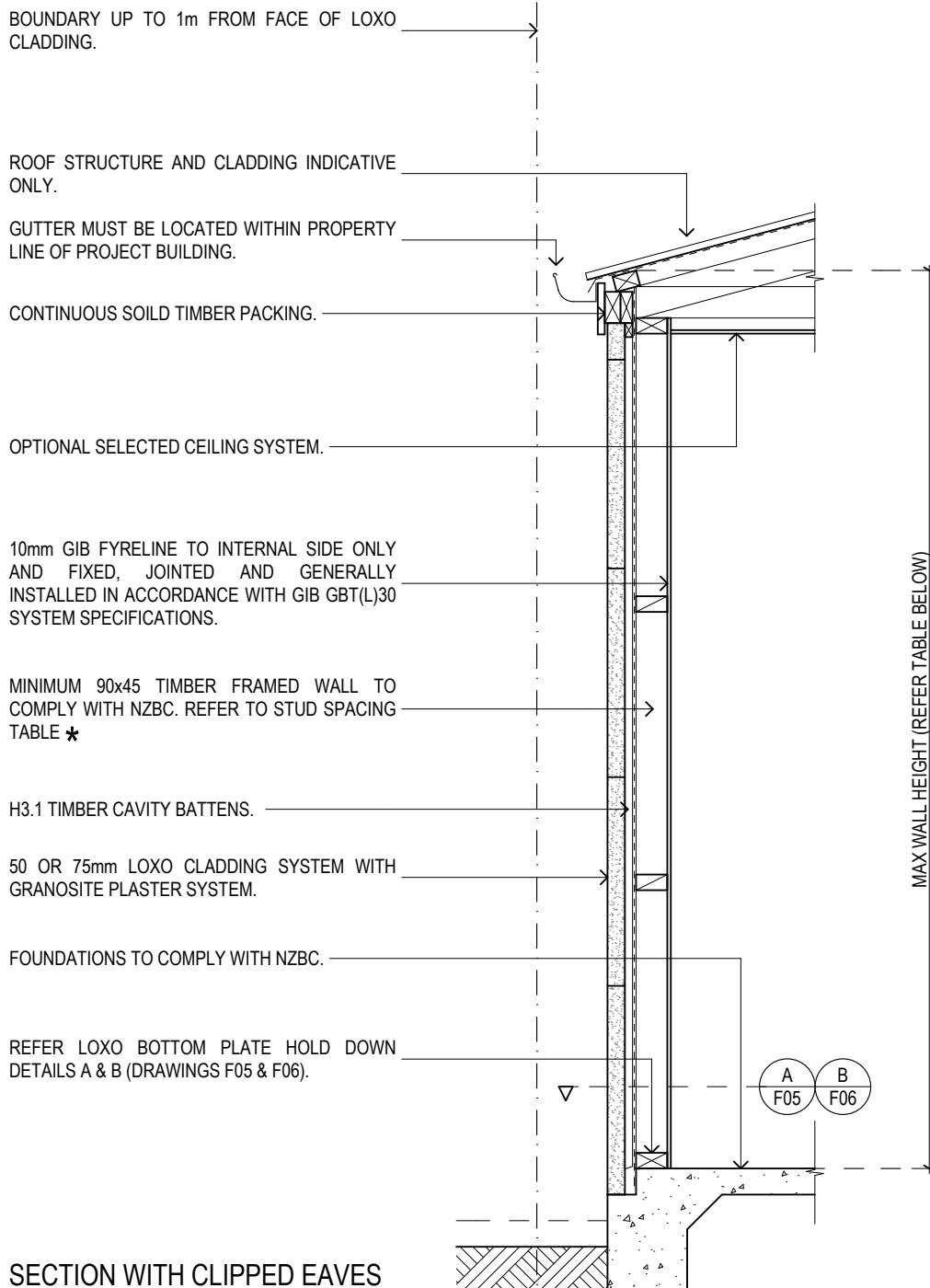
If there are any questions, please do not hesitate to contact me.

Yours sincerely,

Engenuity Consulting Engineers Limited



John Collie
Director, Chartered Fire Engineer



SECTION WITH CLIPPED EAVES

BOUNDARY WALL DETAILS (GARAGE)

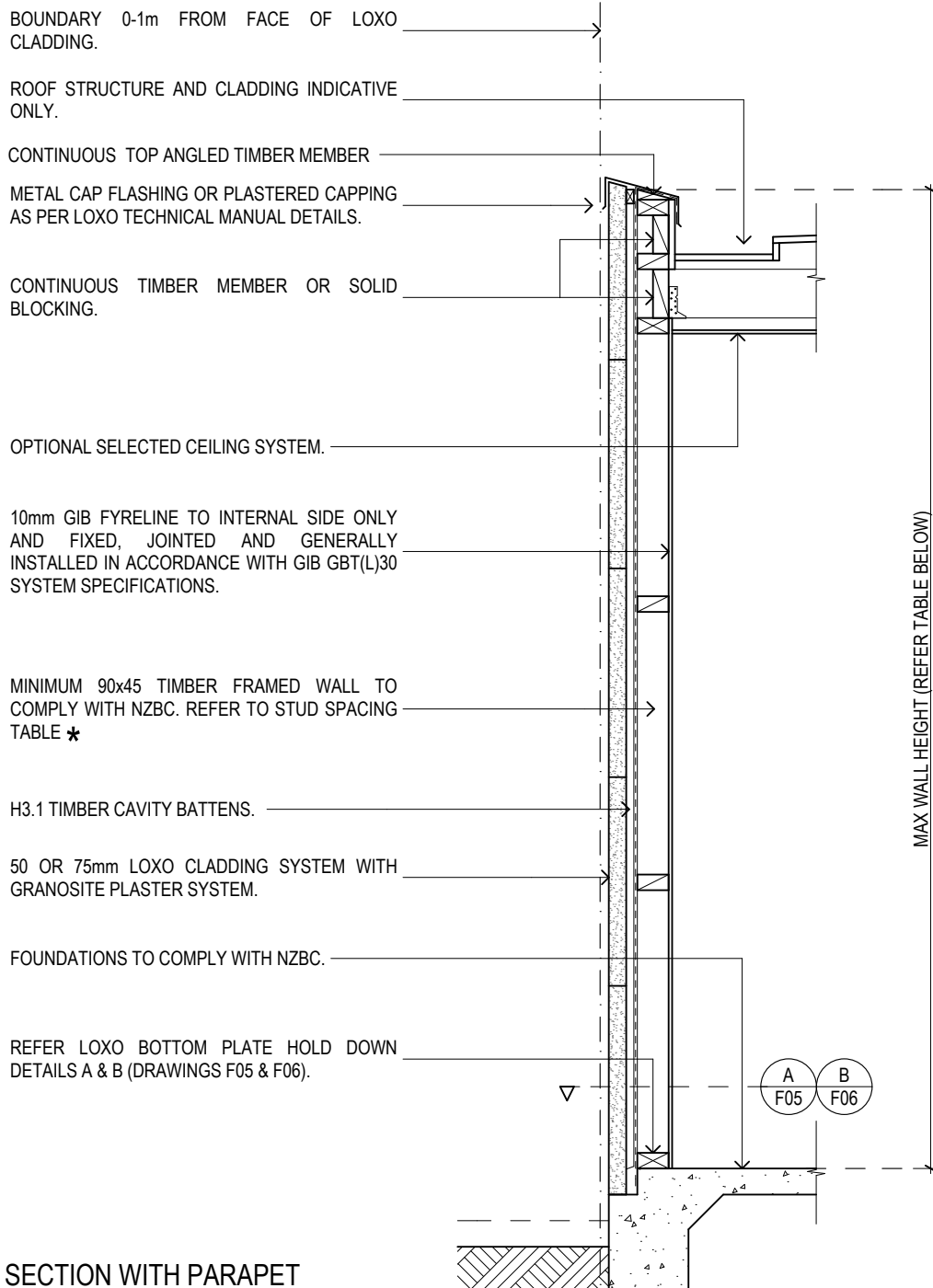
FIRE RATED 30/30/30 - NON VENTED SYSTEM.

NOTES:

SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	3010
90x45	400	2600
90x45	450	2460
140x45	600	3000



SECTION WITH PARAPET

BOUNDARY WALL DETAILS (GARAGE)

FIRE RATED 30/30/30 - NON VENTED SYSTEM.

NOTES:

SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	3010
90x45	400	2600
90x45	450	2460
140x45	600	3000

BOUNDARY UP TO 1m FROM FACE OF LOXO CLADDING.

ROOF STRUCTURE AND CLADDING INDICATIVE ONLY.

SOLID TIMBER BLOCKING.

GUTTER MUST BE LOCATED WITHIN PROPERTY LINE OF PROJECT BUILDING.

IF EAVE PROJECTS WITHIN 650mm OF THE BOUNDARY, THE SOFFIT MUST BE FIRE RATED. USE MINIMUM 6mm JAMES HARDIE SOFFIT LINING.

OPTIONAL SELECTED CEILING SYSTEM.

10mm GIB FYRELINE TO INTERNAL SIDE ONLY AND FIXED, JOINTED AND GENERALLY INSTALLED IN ACCORDANCE WITH GIB GBT(L)30 SYSTEM SPECIFICATIONS.

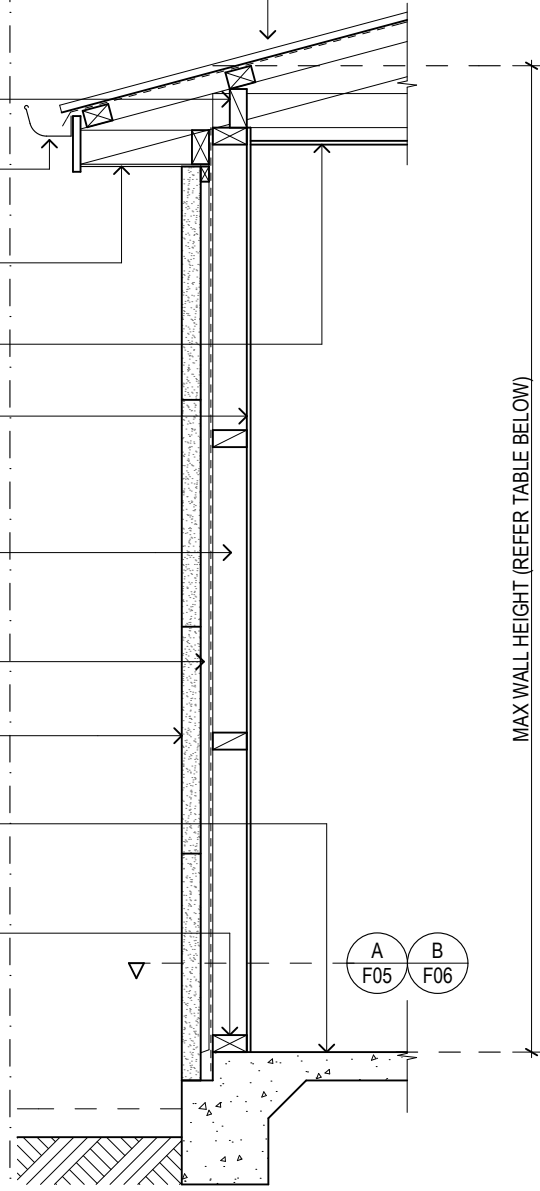
MINIMUM 90x45 TIMBER FRAMED WALL TO COMPLY WITH NZBC. REFER TO STUD SPACING TABLE *

H3.1 TIMBER CAVITY BATTENS.

50 OR 75mm LOXO CLADDING SYSTEM WITH GRANOSITE PLASTER SYSTEM.

FOUNDATIONS TO COMPLY WITH NZBC.

REFER LOXO BOTTOM PLATE HOLD DOWN DETAILS A & B (DRAWINGS F05 & F06).



SECTION WITH EAVES

BOUNDARY WALL DETAILS (GARAGE)

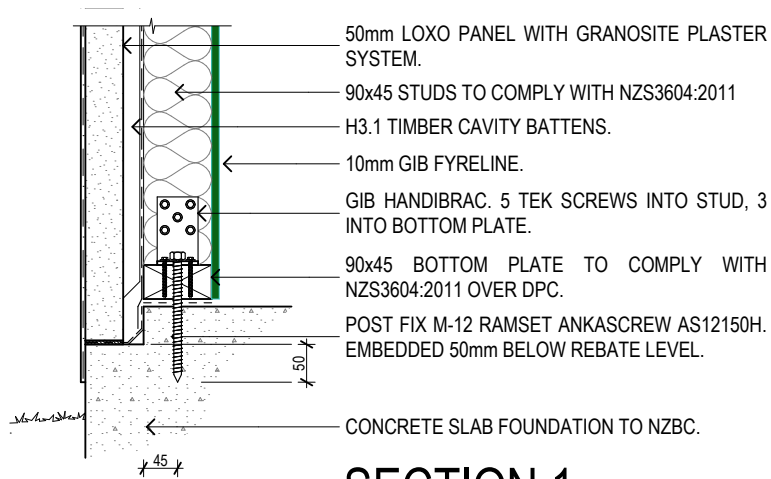
FIRE RATED 30/30/30 - NON VENTED SYSTEM.

NOTES:

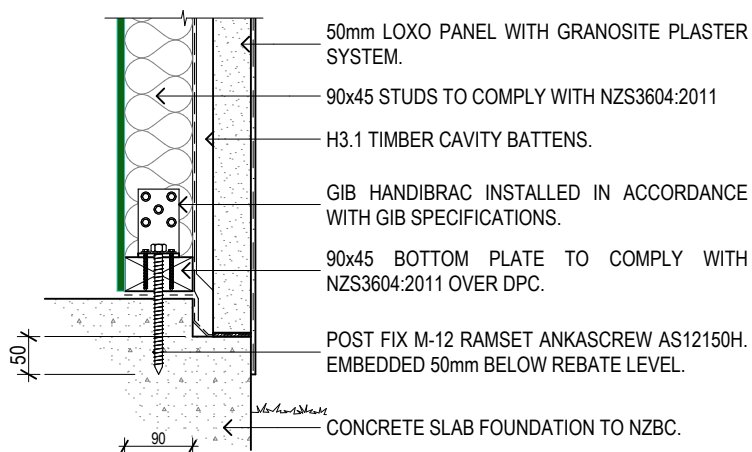
SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

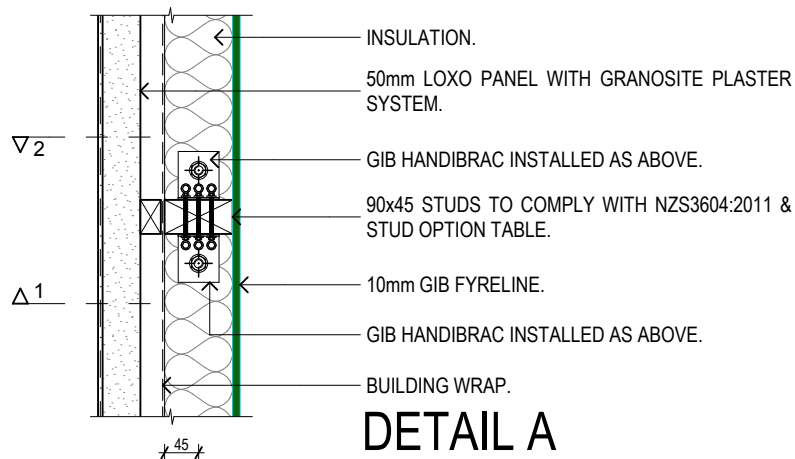
STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	3010
90x45	400	2600
90x45	450	2460
140x45	600	3000



SECTION 1



SECTION 2



DETAIL A

LOXO BOTTOM PLATE HOLD DOWN DETAILS

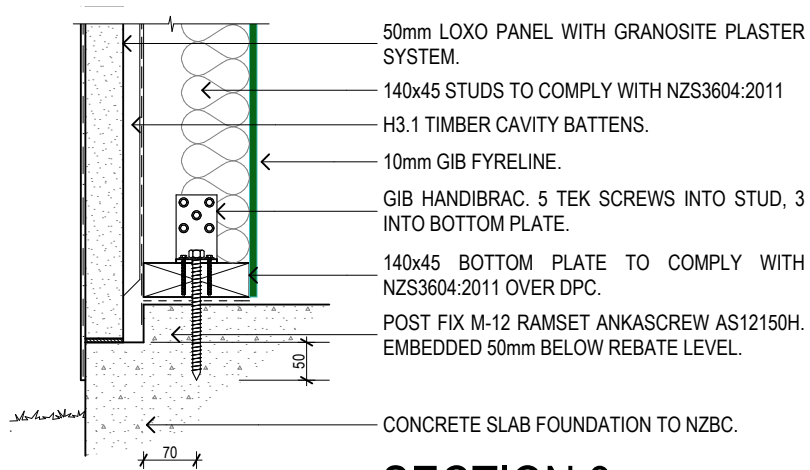
FOR 90mm WIDE STUDS AND BOTTOM PLATES

FIRE RATED 30/30/30

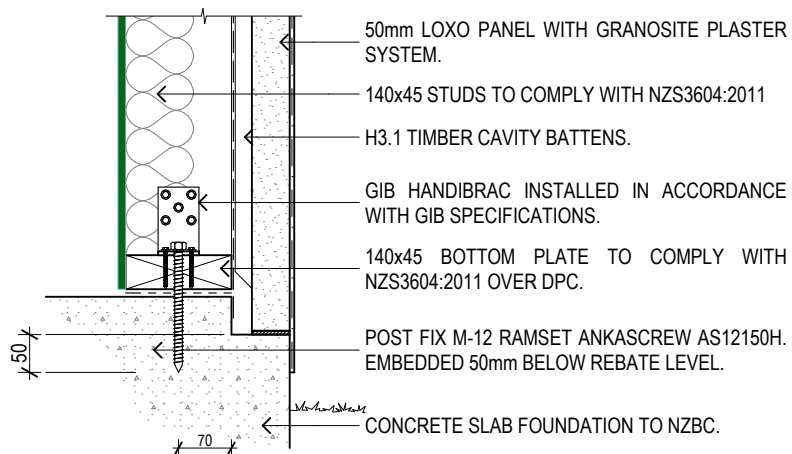
NOTES:

DETAILS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

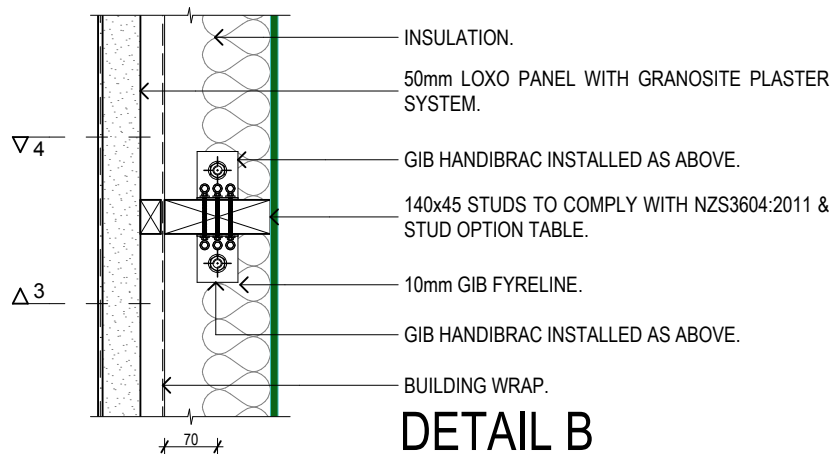
DETAILS FOR 90mm STUDS AND BOTTOM PLATES ONLY. FOR STUDS AND BOTTOM PLATE WIDTHS OF 140mm, BOTTOM PLATE HOLD DOWNS ARE TO BE IN ACCORDANCE WITH DETAIL B



SECTION 3



SECTION 4



DETAIL B

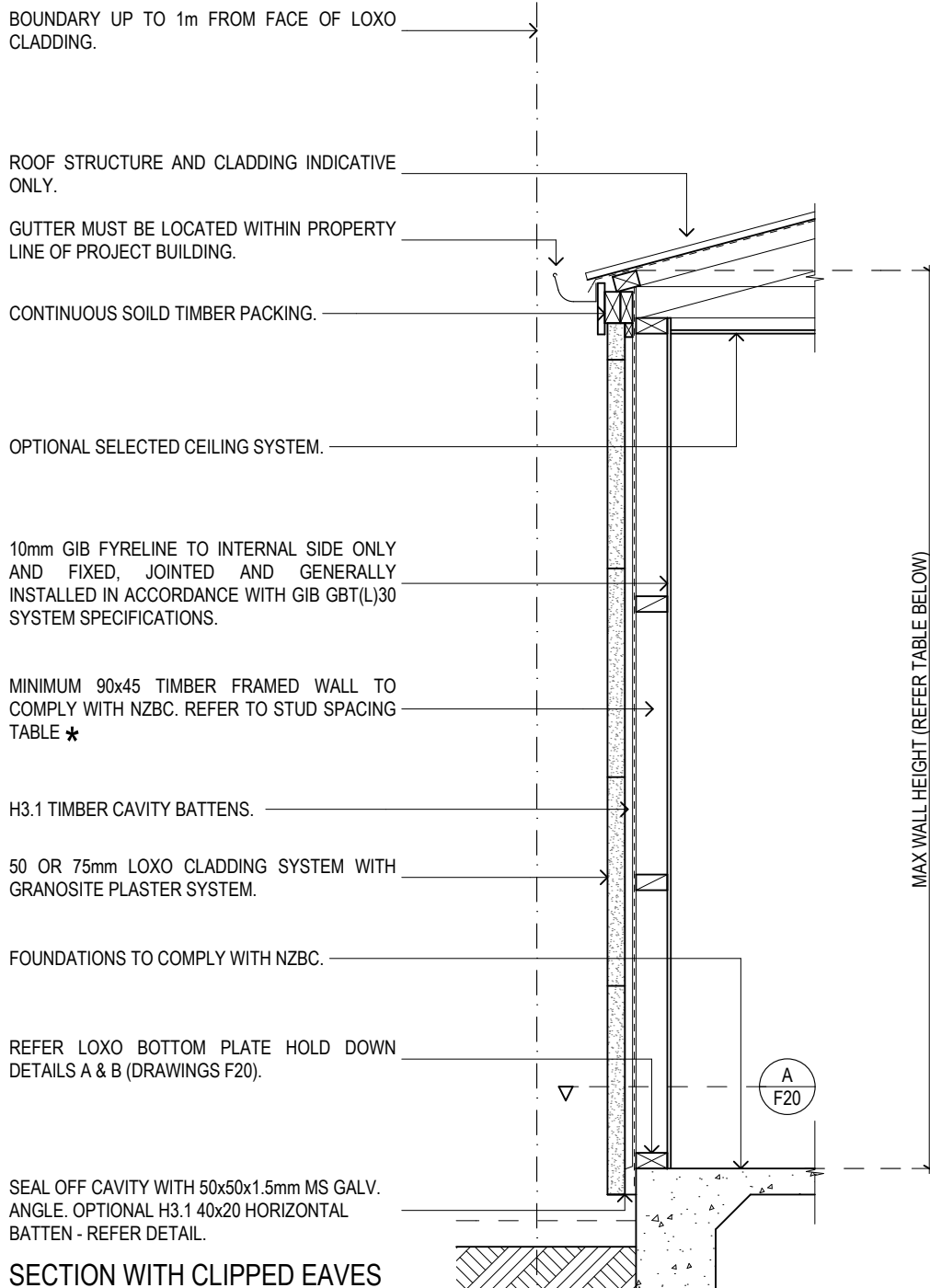
LOXO BOTTOM PLATE HOLD DOWN DETAILS

FOR 140mm WIDE STUDS AND BOTTOM PLATES

FIRE RATED 30/30/30

NOTES:

DETAILS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS. DETAILS FOR 140mm STUDS AND BOTTOM PLATES ONLY. FOR STUDS AND BOTTOM PLATE WIDTHS OF 90mm, BOTTOM PLATE HOLD DOWNS ARE TO BE IN ACCORDANCE WITH DETAIL A



BOUNDARY WALL DETAILS (GARAGE)

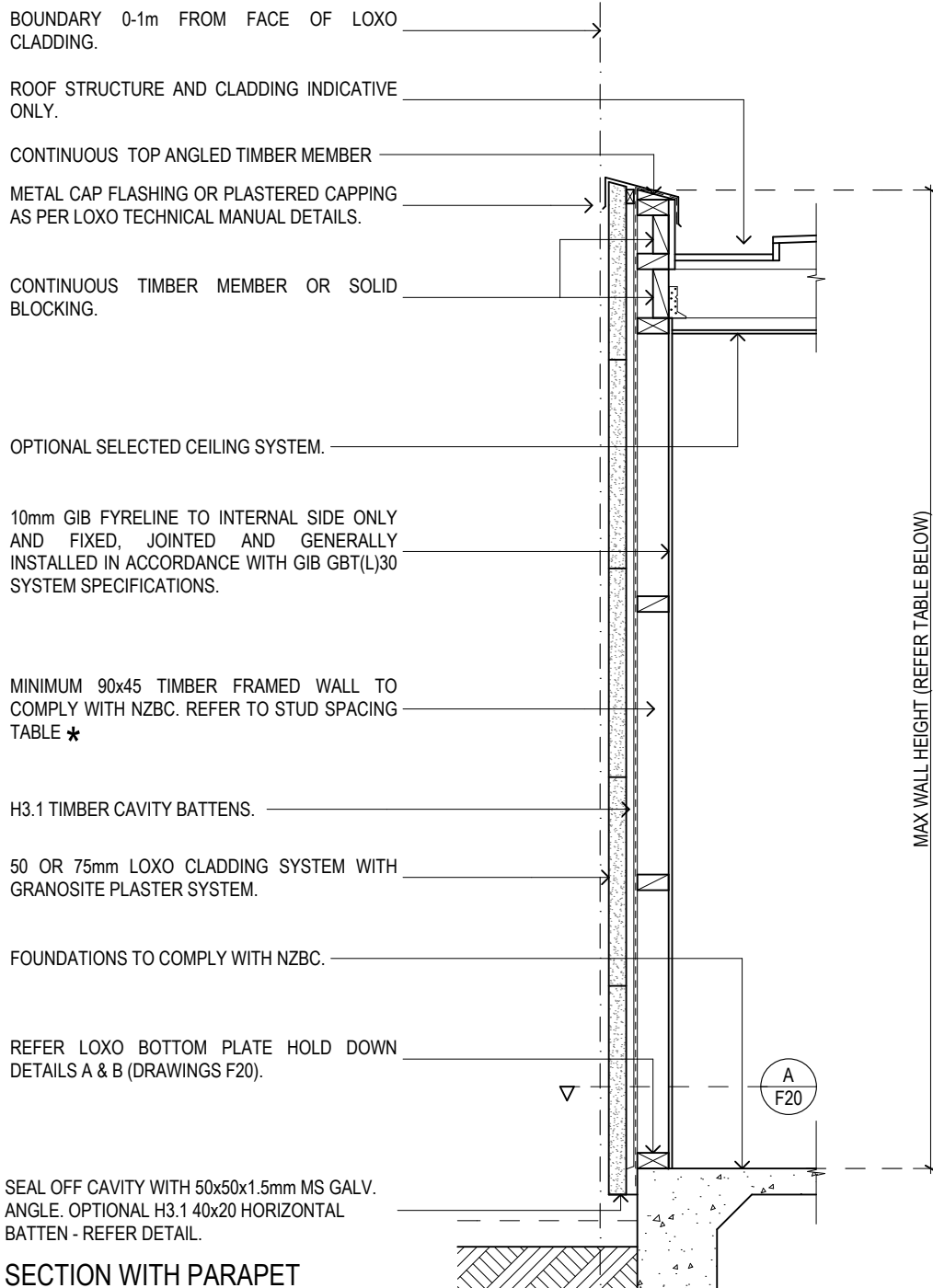
FIRE RATED 30/30/30 - NO VENTS

NOTES:

SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	2970
90x45	400	2570
90x45	450	2420
140x45	600	3040



SECTION WITH PARAPET

BOUNDARY WALL DETAILS (GARAGE)

FIRE RATED 30/30/30 - NO VENTS

NOTES:

SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	2970
90x45	400	2570
90x45	450	2420
140x45	600	3040

BOUNDARY UP TO 1m FROM FACE OF LOXO CLADDING.

ROOF STRUCTURE AND CLADDING INDICATIVE ONLY.

SOLID TIMBER BLOCKING.

GUTTER MUST BE LOCATED WITHIN PROPERTY LINE OF PROJECT BUILDING.

IF EAVE PROJECTS WITHIN 650mm OF THE BOUNDARY, THE SOFFIT MUST BE FIRE RATED. USE MINIMUM 6mm JAMES HARDIE SOFFIT LINING.

OPTIONAL SELECTED CEILING SYSTEM.

10mm GIB FYRELIN TO INTERNAL SIDE ONLY AND FIXED, JOINTED AND GENERALLY INSTALLED IN ACCORDANCE WITH GIB GBT(L)30 SYSTEM SPECIFICATIONS.

MINIMUM 90x45 TIMBER FRAMED WALL TO COMPLY WITH NZBC. REFER TO STUD SPACING TABLE *

H3.1 TIMBER CAVITY BATTENS.

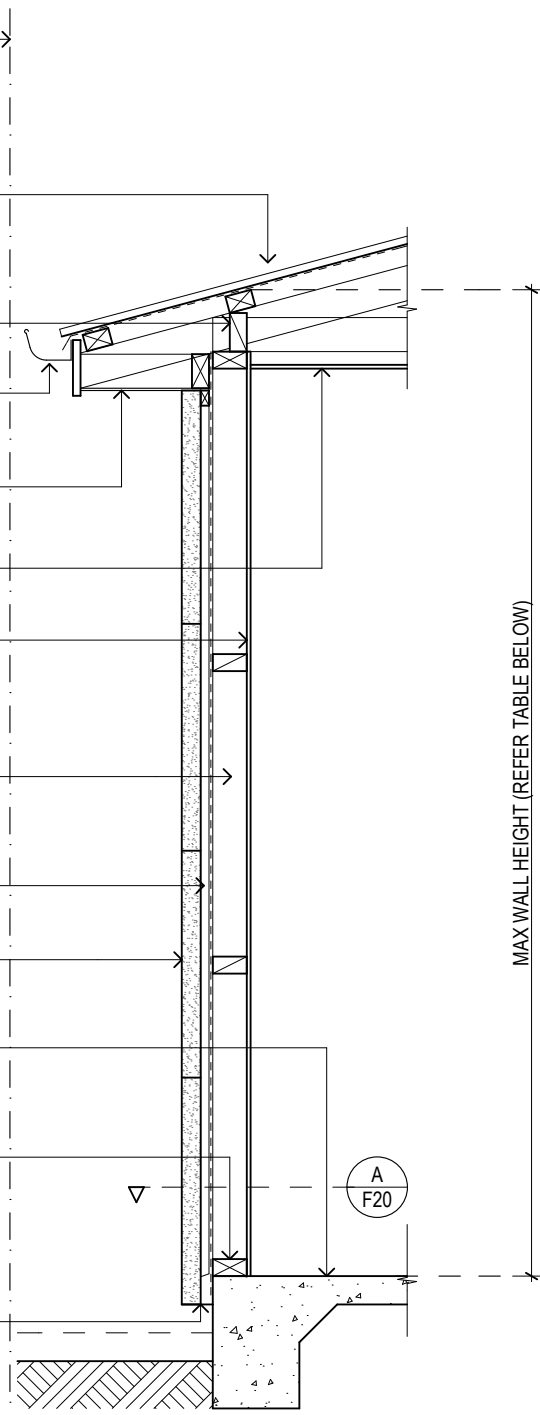
50 OR 75mm LOXO CLADDING SYSTEM WITH GRANOSITE PLASTER SYSTEM.

FOUNDATIONS TO COMPLY WITH NZBC.

REFER LOXO BOTTOM PLATE HOLD DOWN DETAILS A & B (DRAWINGS F20).

SEAL OFF CAVITY WITH 50x50x1.5mm MS GALV. ANGLE. OPTIONAL H3.1 40x20 HORIZONTAL BATTEN - REFER DETAIL.

SECTION WITH EAVES



BOUNDARY WALL DETAILS (GARAGE)

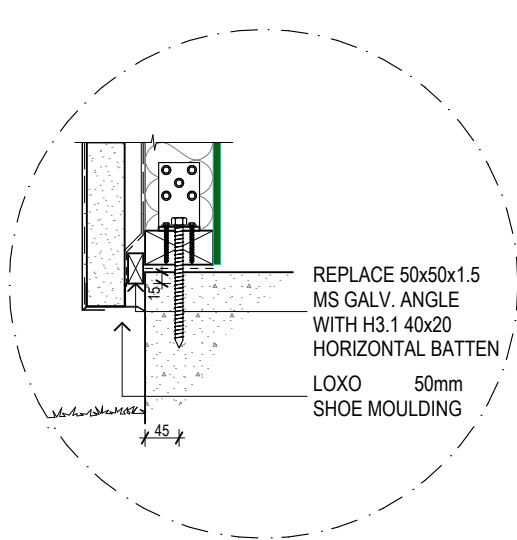
FIRE RATED 30/30/30 - NO VENTS

NOTES:

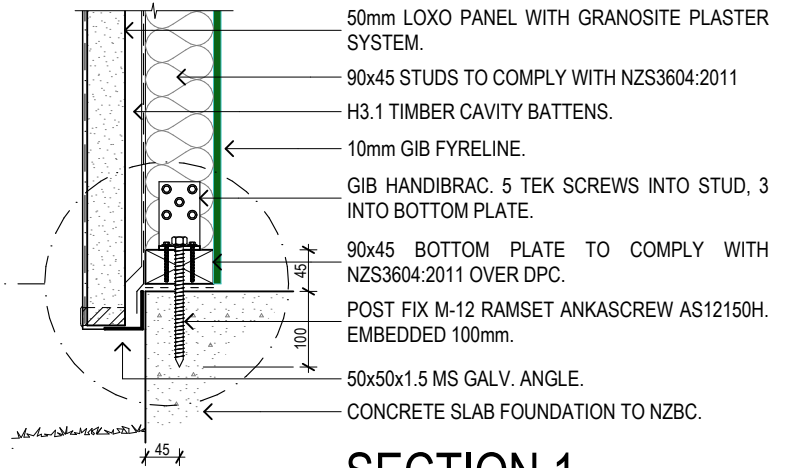
SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

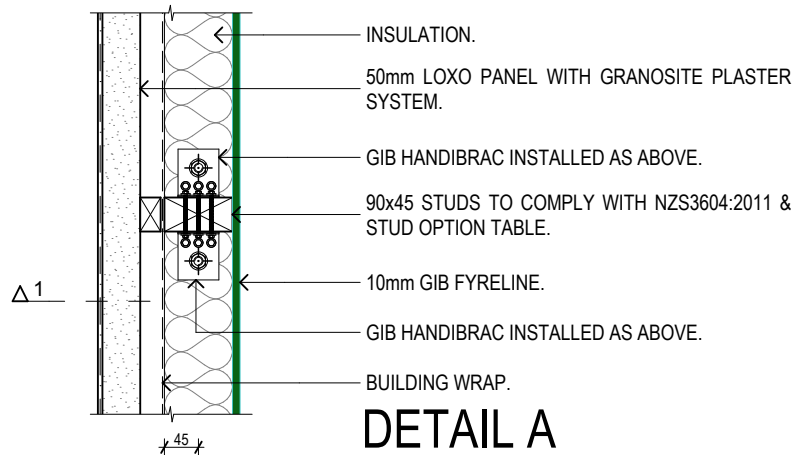
STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	2970
90x45	400	2570
90x45	450	2420
140x45	600	3040



OPTIONAL



SECTION 1



DETAIL A

LOXO BOTTOM PLATE HOLD DOWN DETAILS

FOR 90mm WIDE STUDS AND BOTTOM PLATES
FIRE RATED 30/30/30

NOTES:

DETAILS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS. DETAILS FOR 90mm STUDS AND BOTTOM PLATES ONLY. FOR STUDS AND BOTTOM PLATE WIDTHS OF 140mm, BOTTOM PLATE HOLD DOWNS ARE TO BE LOCATED AT 70mm SLAB EDGE DISTANCE.

31 August 2022

Job No: 18013001

Loxo Cladding NZ Limited
Attn Marcus Stufkens

Via email: m.stufkens@loxocladding.co.nz

RE: Loxo 60/60/60 Fire Rated Boundary Wall Systems

Dear Marcus,

Following a review of the testing and assessments completed by Warrington Australia Pty Ltd (Report 38259000 R6.3 and Summary 38259000 SOA6.3) and specific discussions with Hans Gerlich (Technical Manager, Building Systems, Winstone Wallboards Ltd), Engenuity Consulting Engineers Limited conclude that the Loxo Boundary Wall Systems detailed in drawings 'Fire Rated Garage Boundary Wall', sheets F21-F29, dated 19.06.18 will provide a 60/60/60 fire resistance rating in accordance with AS 1530.4.

No unrated penetrations are permitted through the GIB or Loxo linings. Where penetrations are required, these shall be fire stopped using an appropriate passive fire stopping medium installed strictly in accordance with the manufacturers requirements for the product used.

Note that this standard detail is not appropriate alone for typical 'side by side' or 'one above another' type terrace housing, and that additional specific fire rated junction/ cavity details are necessary to ensure fire separation between units are achieved.

Take note that this letter does not address the durability or post fire structural stability requirements of the New Zealand Building Code.

Engenuity Consulting Engineers Limited reserves the right at any time to amend or withdraw this letter in the light of new knowledge. In lieu of the above, this letter is valid up to 28 February 2026.

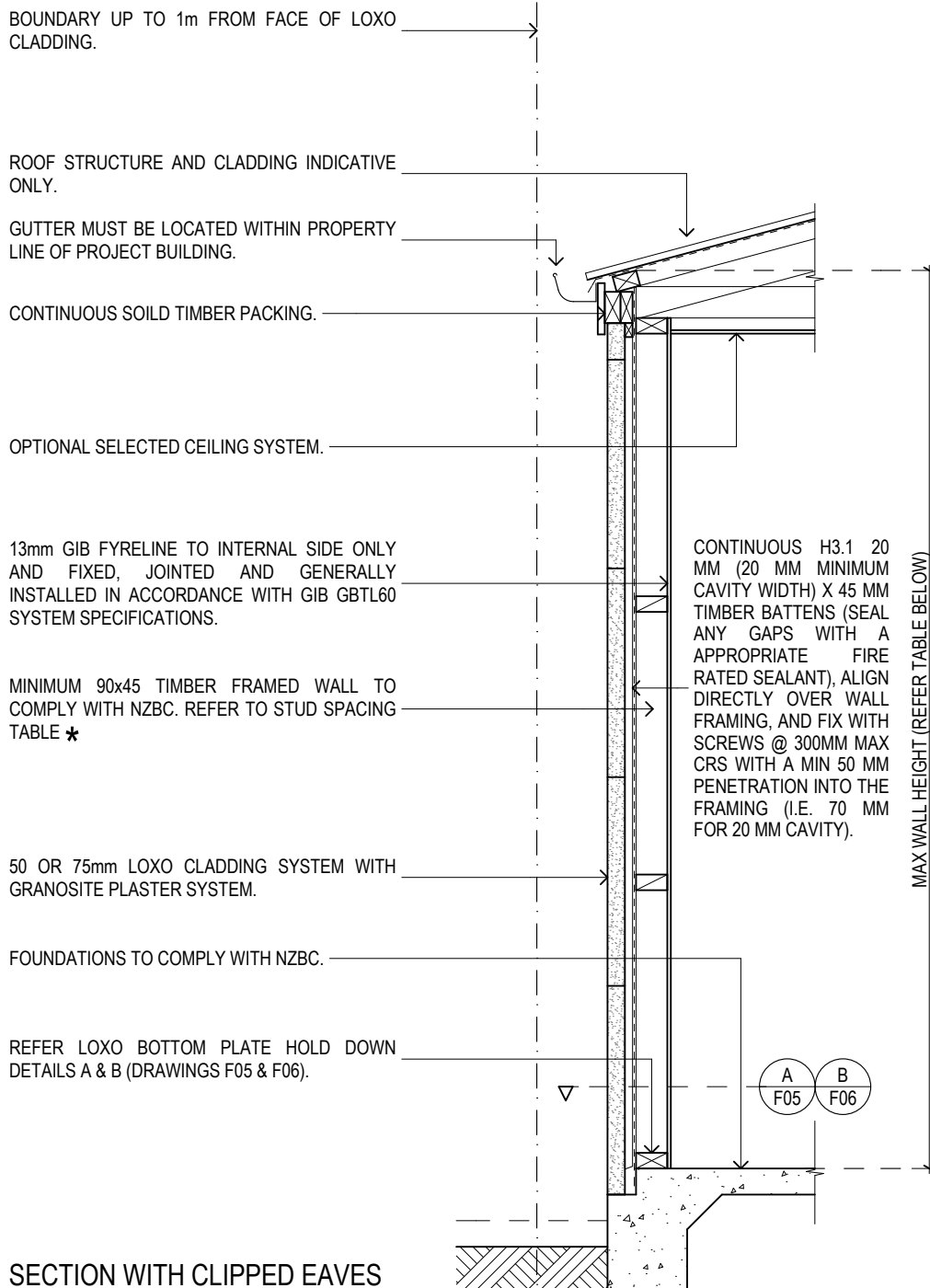
If there are any questions, please do not hesitate to contact me.

Yours sincerely,

Engenuity Consulting Engineers Limited



John Collie
Director, Chartered Fire Engineer



SECTION WITH CLIPPED EAVES

BOUNDARY WALL DETAILS

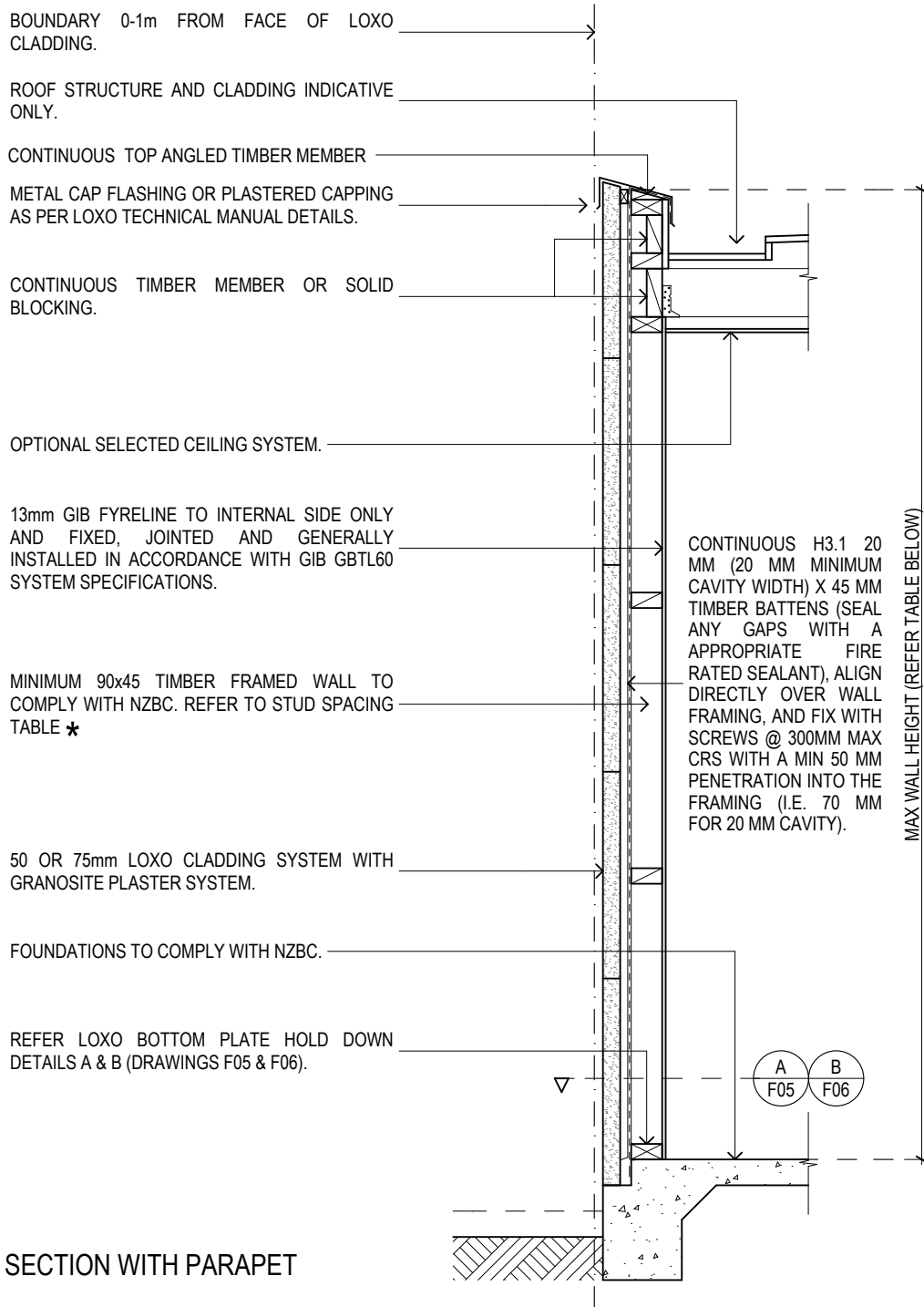
FIRE RATED 60/60/60 - NON VENTED SYSTEM.

NOTES:

SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	3010
90x45	400	2600
90x45	450	2460
140x45	600	3000



SECTION WITH PARAPET

BOUNDARY WALL DETAILS

FIRE RATED 60/60/60 - NON VENTED SYSTEM.

NOTES:

SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	3010
90x45	400	2600
90x45	450	2460
140x45	600	3000

BOUNDARY UP TO 1m FROM FACE OF LOXO CLADDING.

ROOF STRUCTURE AND CLADDING INDICATIVE ONLY.

SOLID TIMBER BLOCKING.

GUTTER MUST BE LOCATED WITHIN PROPERTY LINE OF PROJECT BUILDING.

IF EAVE PROJECTS WITHIN 650mm OF THE BOUNDARY, THE SOFFIT MUST BE FIRE RATED. USE MINIMUM 6mm JAMES HARDIE SOFFIT LINING.

OPTIONAL SELECTED CEILING SYSTEM.

13mm GIB FYRELINE TO INTERNAL SIDE ONLY AND FIXED, JOINTED AND GENERALLY INSTALLED IN ACCORDANCE WITH GIB GBTL60 SYSTEM SPECIFICATIONS.

MINIMUM 90x45 TIMBER FRAMED WALL TO COMPLY WITH NZBC. REFER TO STUD SPACING TABLE *

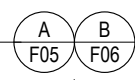
50 OR 75mm LOXO CLADDING SYSTEM WITH GRANOSITE PLASTER SYSTEM.

FOUNDATIONS TO COMPLY WITH NZBC.

REFER LOXO BOTTOM PLATE HOLD DOWN DETAILS A & B (DRAWINGS F05 & F06).

CONTINUOUS H3.1 20 MM (20 MM MINIMUM CAVITY WIDTH) X 45 MM TIMBER BATTENS (SEAL ANY GAPS WITH A APPROPRIATE FIRE RATED SEALANT), ALIGN DIRECTLY OVER WALL FRAMING, AND FIX WITH SCREWS @ 300MM MAX CRS WITH A MIN 50 MM PENETRATION INTO THE FRAMING (I.E. 70 MM FOR 20 MM CAVITY).

MAX WALL HEIGHT (REFER TABLE BELOW)



SECTION WITH EAVES

BOUNDARY WALL DETAILS

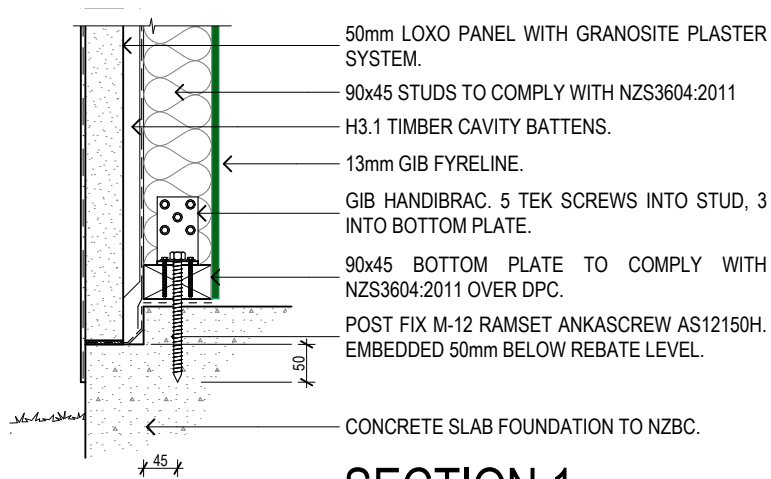
FIRE RATED 60/60/60 - NON VENTED SYSTEM.

NOTES:

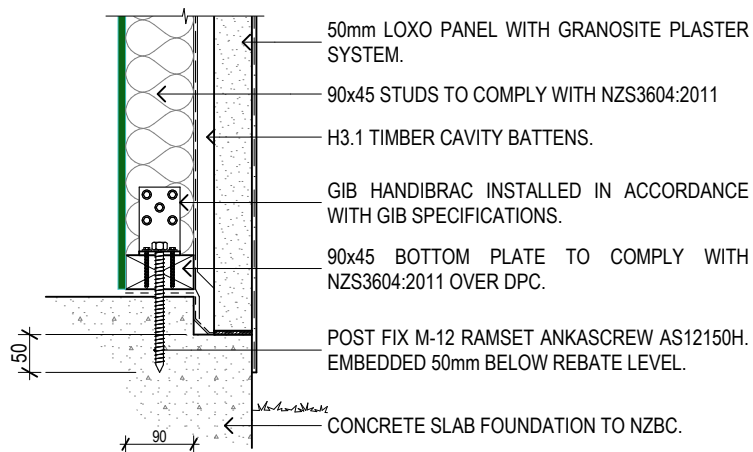
SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

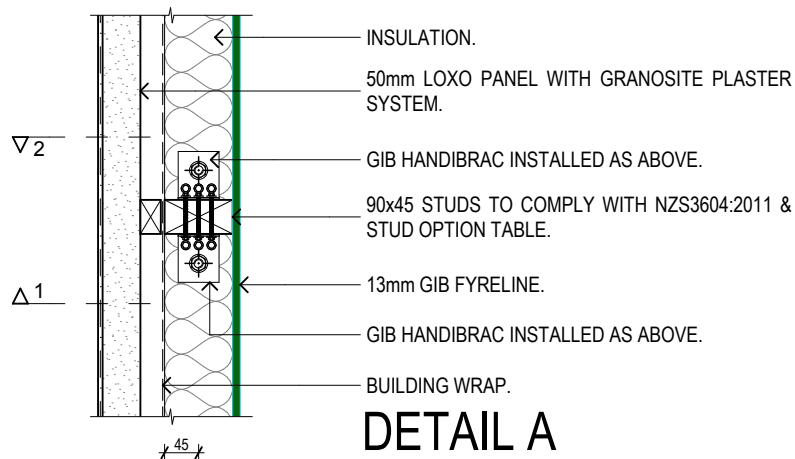
STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	3010
90x45	400	2600
90x45	450	2460
140x45	600	3000



SECTION 1



SECTION 2



DETAIL A

LOXO BOTTOM PLATE HOLD DOWN DETAILS

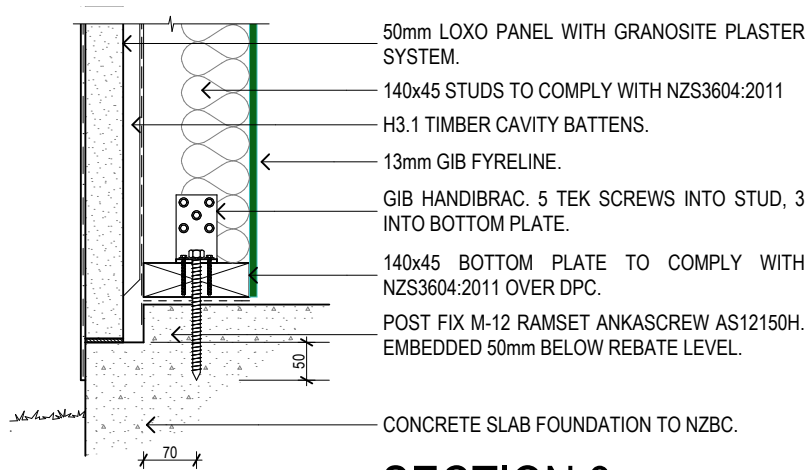
FOR 90mm WIDE STUDS AND BOTTOM PLATES

FIRE RATED 60/60/60

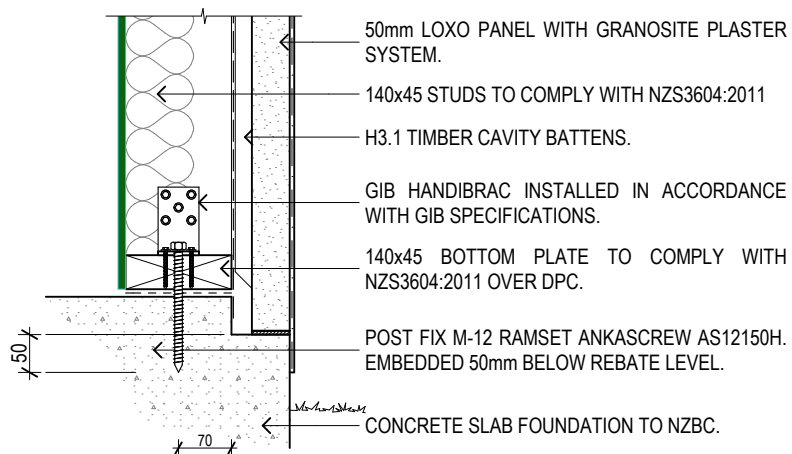
NOTES:

DETAILS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

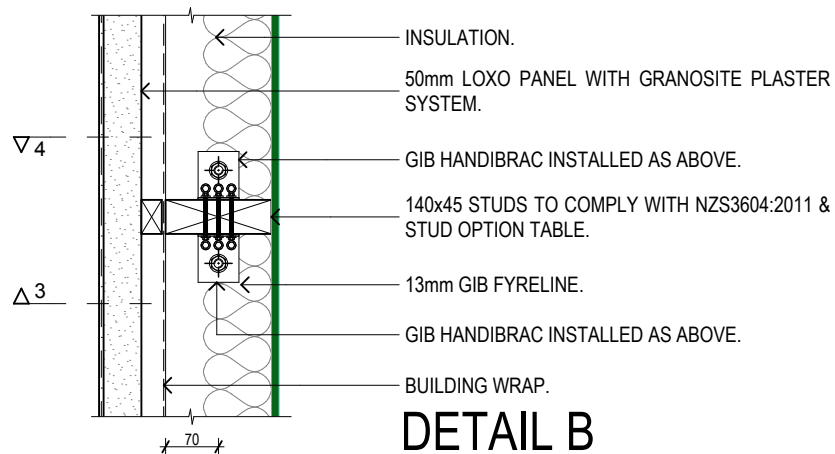
DETAILS FOR 90mm STUDS AND BOTTOM PLATES ONLY. FOR STUDS AND BOTTOM PLATE WIDTHS OF 140mm, BOTTOM PLATE HOLD DOWNS ARE TO BE IN ACCORDANCE WITH DETAIL B



SECTION 3



SECTION 4



DETAIL B

LOXO BOTTOM PLATE HOLD DOWN DETAILS

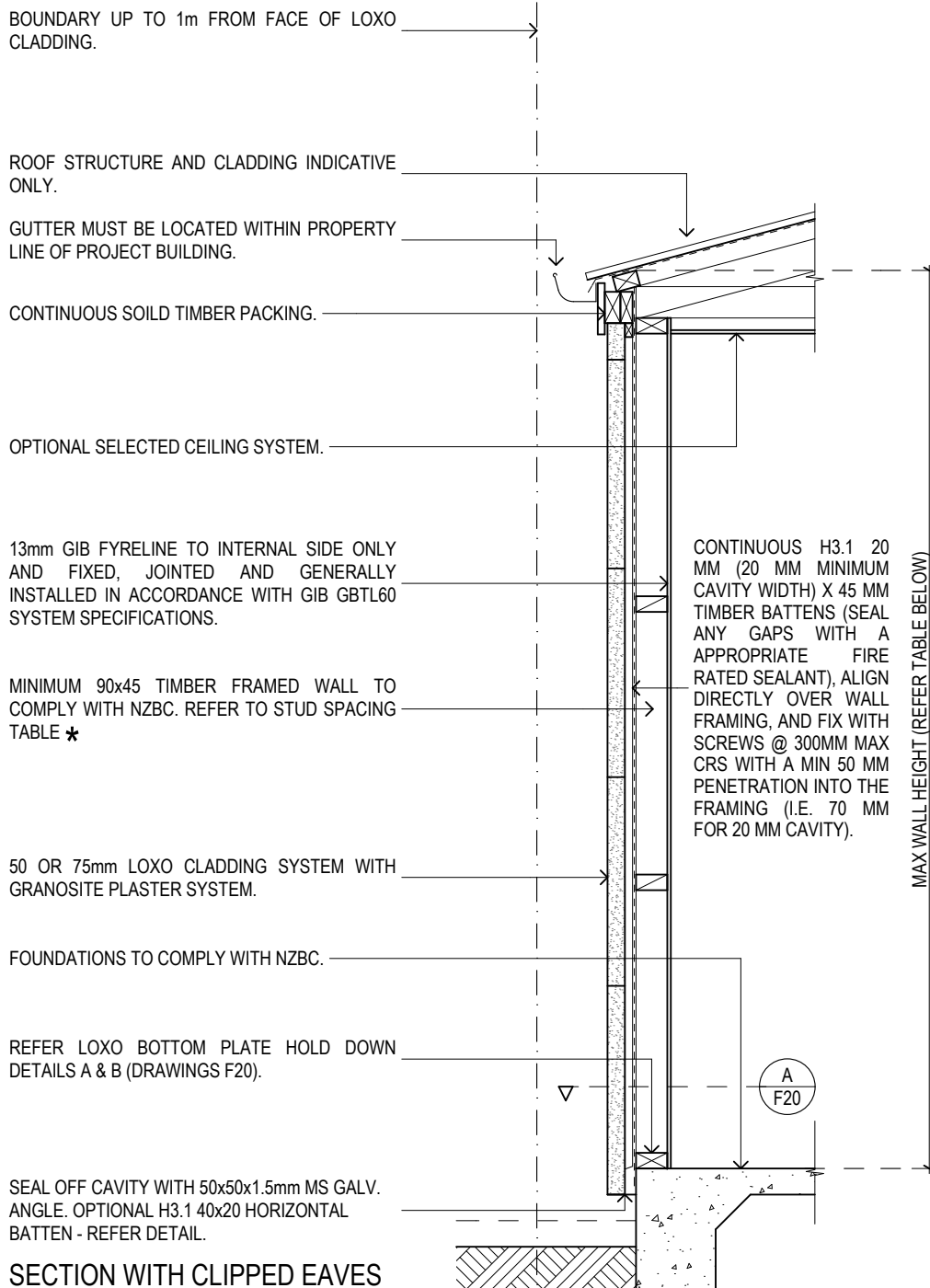
FOR 140mm WIDE STUDS AND BOTTOM PLATES

FIRE RATED 60/60/60

NOTES:

DETAILS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

DETAILS FOR 140mm STUDS AND BOTTOM PLATES ONLY. FOR STUDS AND BOTTOM PLATE WIDTHS OF 90mm, BOTTOM PLATE HOLD DOWNS ARE TO BE IN ACCORDANCE WITH DETAIL A



BOUNDARY WALL DETAILS

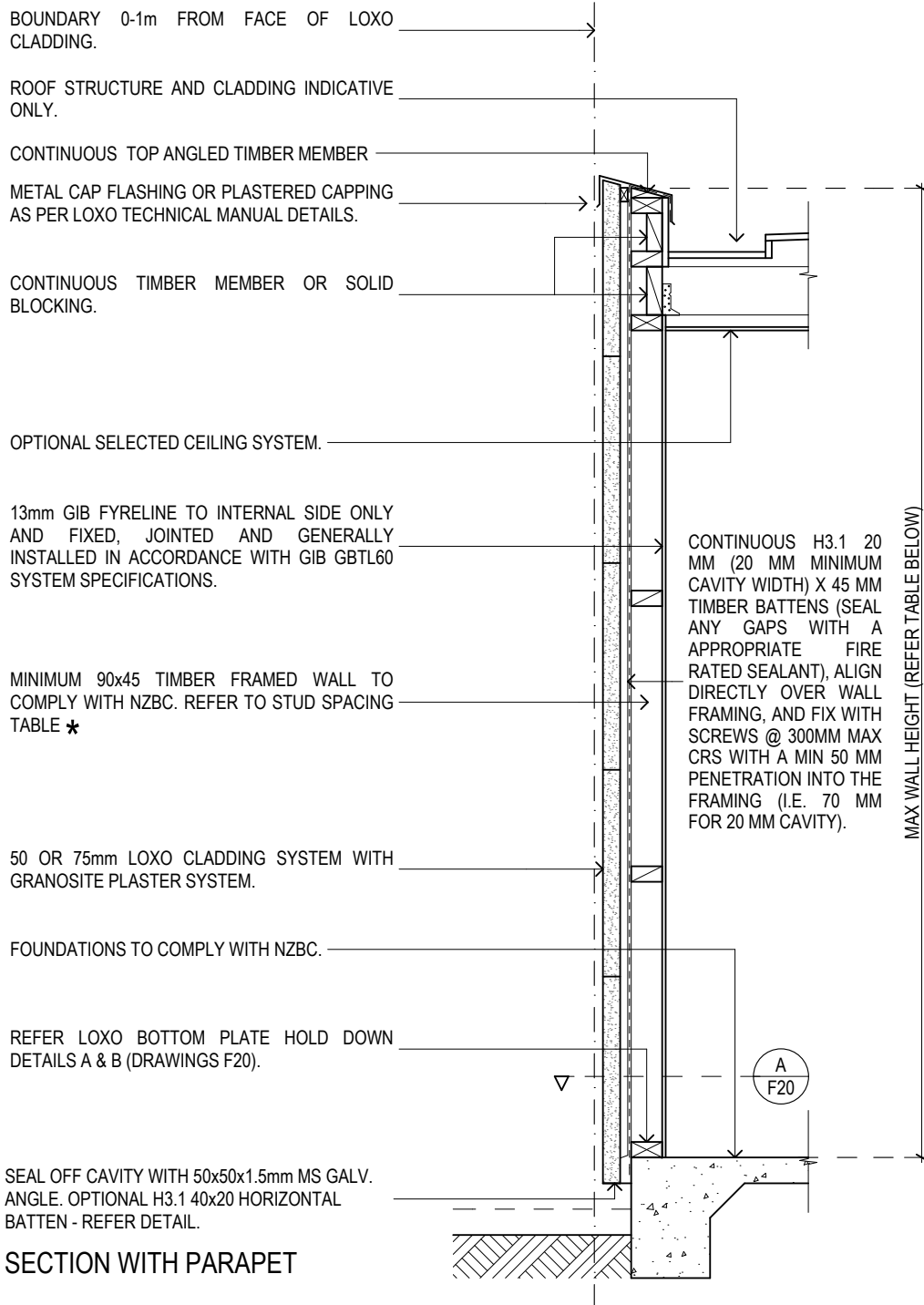
FIRE RATED 60/60/60 - NO VENTS

NOTES:

SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	2970
90x45	400	2570
90x45	450	2420
140x45	600	3040



SECTION WITH PARAPET

BOUNDARY WALL DETAILS

FIRE RATED 60/60/60 - NO VENTS

NOTES:

SECTIONS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS.

* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	2970
90x45	400	2570
90x45	450	2420
140x45	600	3040

BOUNDARY UP TO 1m FROM FACE OF LOXO CLADDING.

ROOF STRUCTURE AND CLADDING INDICATIVE ONLY.

SOLID TIMBER BLOCKING.

GUTTER MUST BE LOCATED WITHIN PROPERTY LINE OF PROJECT BUILDING.

IF EAVE PROJECTS WITHIN 650mm OF THE BOUNDARY, THE SOFFIT MUST BE FIRE RATED. USE MINIMUM 6mm JAMES HARDIE SOFFIT LINING.

OPTIONAL SELECTED CEILING SYSTEM.

13mm GIB FYRELIN TO INTERNAL SIDE ONLY AND FIXED, JOINTED AND GENERALLY INSTALLED IN ACCORDANCE WITH GIB GBTL60 SYSTEM SPECIFICATIONS.

MINIMUM 90x45 TIMBER FRAMED WALL TO COMPLY WITH NZBC. REFER TO STUD SPACING TABLE *

50 OR 75mm LOXO CLADDING SYSTEM WITH GRANOSITE PLASTER SYSTEM.

FOUNDATIONS TO COMPLY WITH NZBC.

REFER LOXO BOTTOM PLATE HOLD DOWN DETAILS A & B (DRAWINGS F20).

SEAL OFF CAVITY WITH 50x50x1.5mm MS GALV. ANGLE. OPTIONAL H3.1 40x20 HORIZONTAL BATTEN - REFER DETAIL.

CONTINUOUS H3.1 20 MM (20 MM MINIMUM CAVITY WIDTH) X 45 MM TIMBER BATTENS (SEAL ANY GAPS WITH A APPROPRIATE FIRE RATED SEALANT), ALIGN DIRECTLY OVER WALL FRAMING, AND FIX WITH SCREWS @ 300MM MAX CRS WITH A MIN 50 MM PENETRATION INTO THE FRAMING (I.E. 70 MM FOR 20 MM CAVITY).

MAX WALL HEIGHT (REFER TABLE BELOW)

SECTION WITH EAVES

BOUNDARY WALL DETAILS

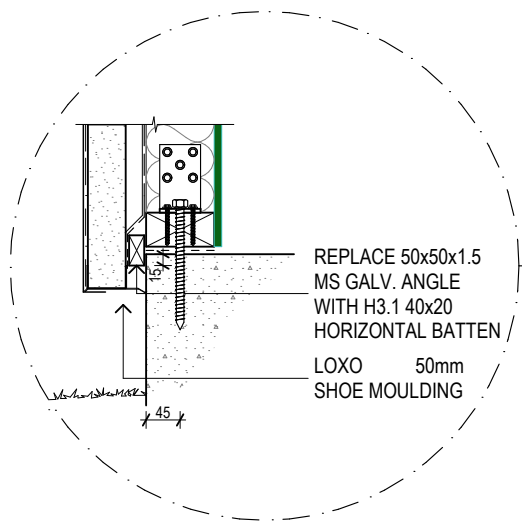
FIRE RATED 60/60/60 - NO VENTS

NOTES:

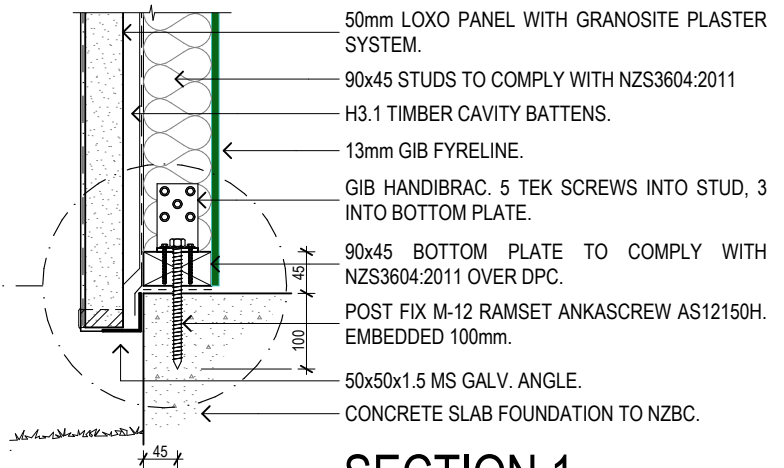
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* REFER TO ALLOWABLE STUD SIZE AND CENTRES FOR THE APPLICABLE MAXIMUM WALL HEIGHT.

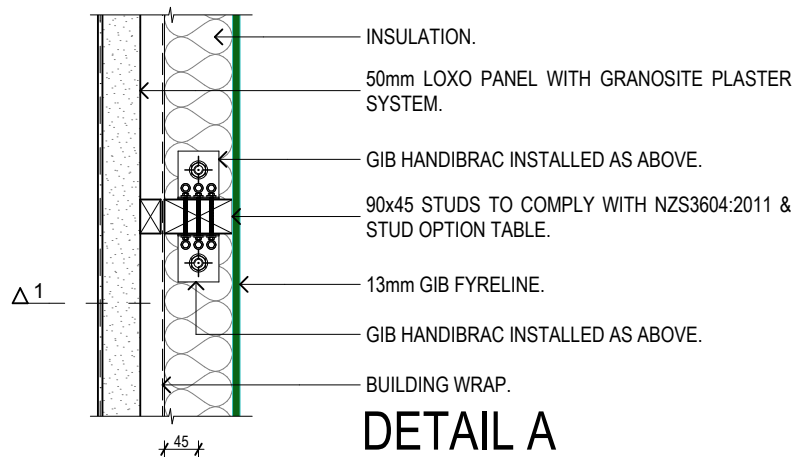
STUD TABLE		
STUD(MSG8, mm)	CENTRES(mm)	MAX. WALL HT.(mm)
90x45	300	2970
90x45	400	2570
90x45	450	2420
140x45	600	3040



OPTIONAL



SECTION 1



DETAIL A

LOXO BOTTOM PLATE HOLD DOWN DETAILS

FOR 90mm WIDE STUDS AND BOTTOM PLATES
FIRE RATED 60/60/60

NOTES:

DETAILS INDICATIVE AND INTENDED FOR THE FIRE RATED SYSTEM ILLUSTRATION ONLY. REFER TO LOXO TECHNICAL MANUAL IN ALL CASES FOR SPECIFIC JUNCTION DETAILS. DETAILS FOR 90mm STUDS AND BOTTOM PLATES ONLY. FOR STUDS AND BOTTOM PLATE WIDTHS OF 140mm, BOTTOM PLATE HOLD DOWNS ARE TO BE LOCATED AT 70mm SLAB EDGE DISTANCE.