

CONSTRUCTION CERTIFICATE
Approved Plans & Specifications
relating to: Date Approved: 23 May 2022
Certificate No.: CC-22071

BLACKETT MAGUIRE + GOLDSMITH PTY LTD

xylem

ILLUMINATED BUILDING SIGNAGE VER 1

Note:
Flexface, Vynyl, Acrylic, ACM,
PVC, LED's and electricals
excluded from engineering

Refer to Design Certificate for address
1 Sign as shown
Date: 10.05.2022
Rev A

Brendon Prentice
MIE Aust CP Eng NER
QLD (13209) NT (239827ES)
VIC (EC45792) TAS (CC7425)
NSW, SA & WA - N/A

Signature: *B. Prentice*

Registered on the NER in the area(s)
of practice of Structural Engineering

 National
Engineering
Register

ELEGANT
ENGINEERING

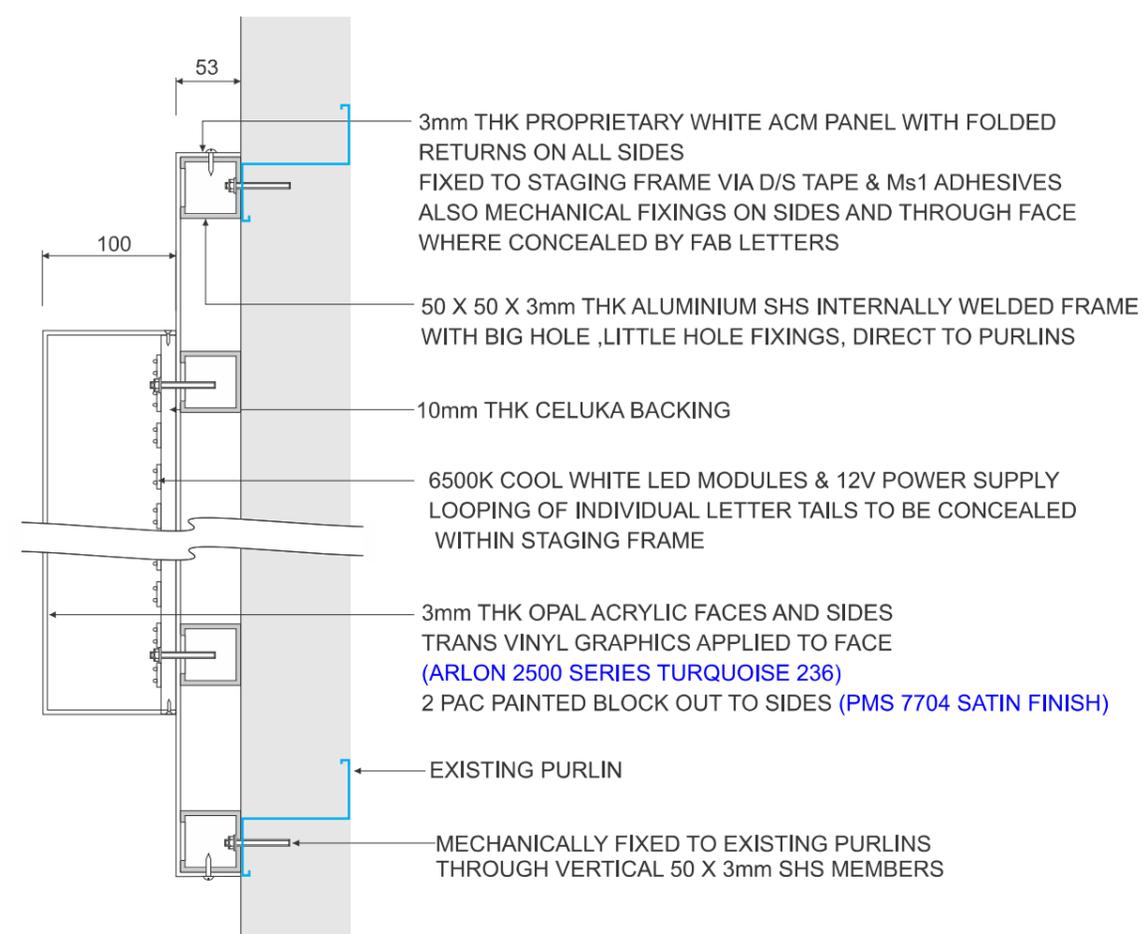
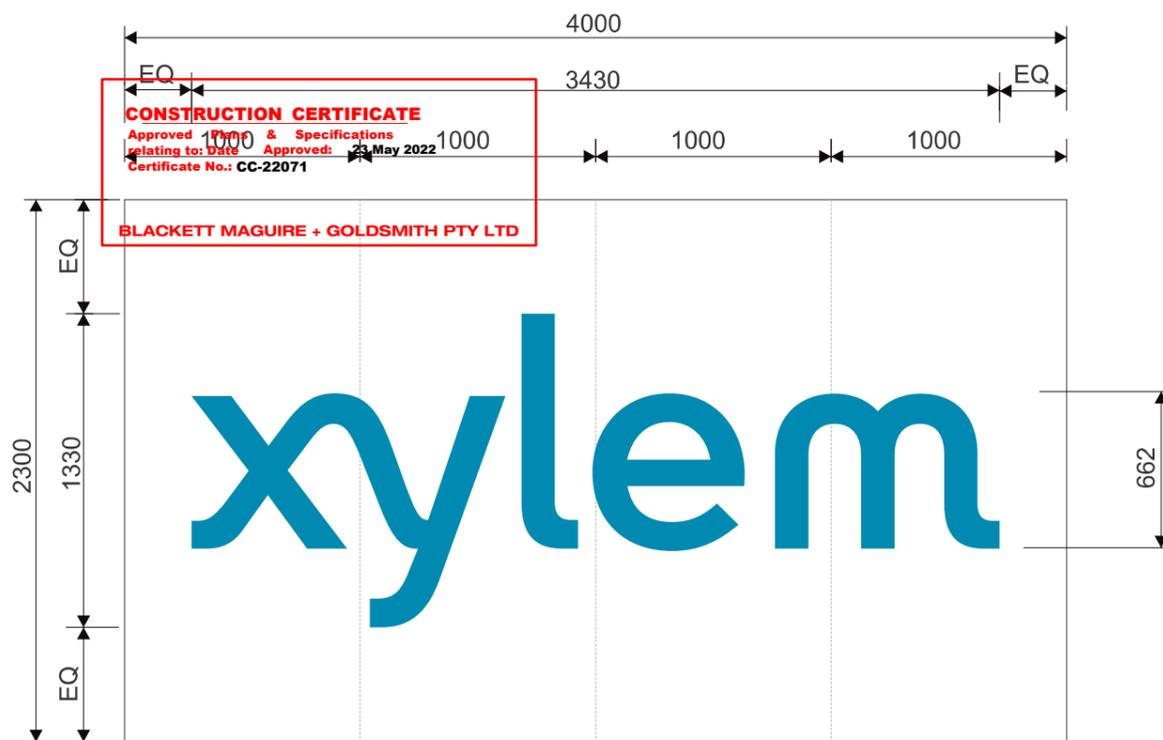
JOB NO.8321 DATE - 28/04/2022

Refer to Design Certificate for address
 1 Sign as shown
 Date: 10.05.2022
 Rev A

Brendon Prentice
 MIEAust CPEng NER
 QLD (13209) NT (239827ES)
 VIC (EC45792) TAS (CC7425)
 NSW, SA & WA - N/A
 Signature: *B. Prentice*
 Registered on the NER in the area(s)
 of practice of Structural Engineering

National Engineering Register

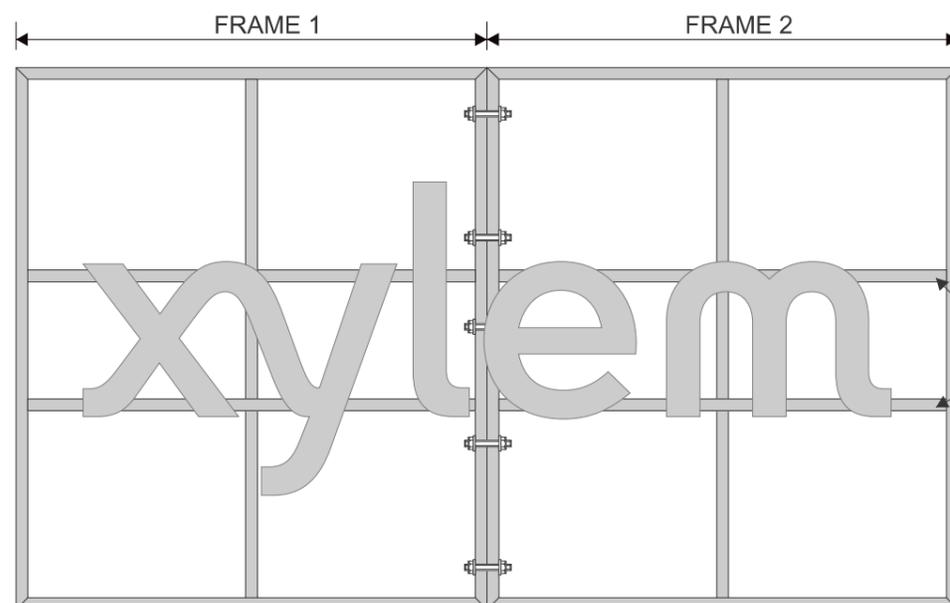
ELEGANT ENGINEERING



FRONT VIEW

DETAILS:

100mm DEEP, 3D FABRICATED LETTERS TO WHITE ACM STAGING FRAME
 ILLUMINATED FACES WITH TRANS VINYL APPLIED (ARLON 2500 SERIES TURQUOISE 236)
 NON ILLUMINATED BLOCK OUT SIDES WITH 2 PAC PAINTED PMS 7704C SATIN FINISH



TYPICAL VERTICAL SECTION

Sign Fixing Note

Max Total Sign weight is 92kg. (10kg/m²)

All screws to be galv. 10-16 or 12-24 hex head screws.

Provide

At each vertical / building purlin crossover point 2 screws (Min 24 total for sign)
 Along top and bottom rail, provide 50x3 aluminium flat bar inside building and screws
 each wall rib (nom 200 cts) (Min 35 screws for sign).
 Along horizontal members top and bottom of letters provide screws every 3rd wall rib to
 existing wall sheeting. (nom 600 cts) (Min 12 screws for sign).

CLIENT APPROVAL

APPROVED FOR PRODUCTION

BY _____ DATE _____

Copyright ©

This design is lent and
 subject to recall
 reproduction in any material
 form is reserved
 under copyright law.

NOTE TO CLIENT

Please check spelling, dimensions, colours, fixings,
 specifications, installations etc on this drawing.
 If in any doubt please contact Insight Signs.

Description:

XYLEM - ILLUMINATED BUILDING SIGNAGE

Drawn by	Quantity	Size	Scale	Date
MB	1 OFF	A3	1:30	28/04/2022

REVISIONS

Revision No.	Date

Job No.

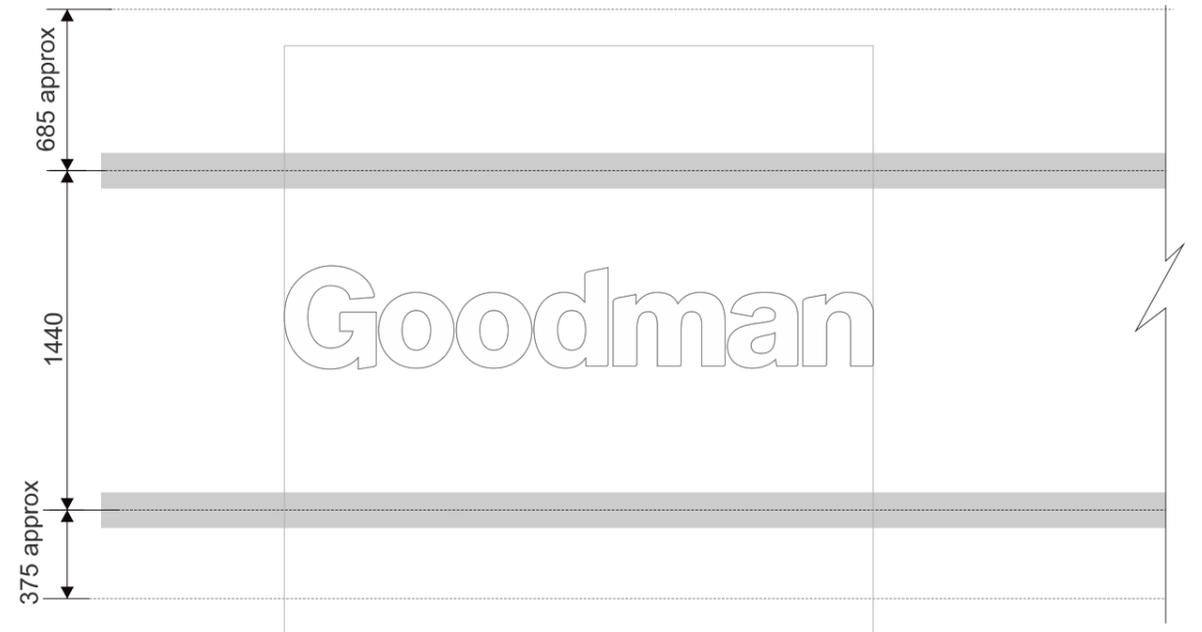
8321

Drawing No.

A1

PURLIN SET OUT

ALL SET OUT MEASUREMENTS ARE +/- 50mm
CONSTRUCTION CERTIFICATE
 Approved Plans & Specifications
 relating to: Date: 23 May 2022
 Certificate No.: CC-22071
BLACKETT MAGUIRE + GOLDSMITH PTY LTD



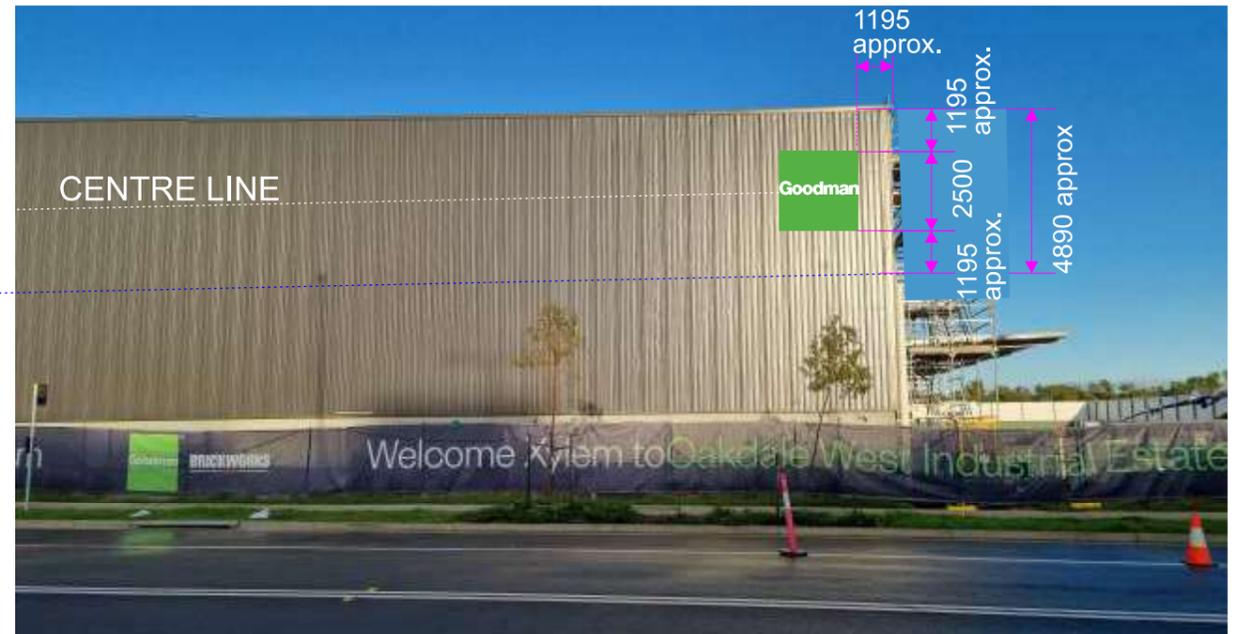
Refer to Design Certificate for address
 1 Sign as shown
 Date: 10.05.2022
 Rev A

Brendon Prentice
 MIEAust CPEng NER
 QLD (13209) NT (239827ES)
 VIC (EC45792) TAS (CG7425)
 NSW, SA & WA - N/A
 Signature: *B. Prentice*
 Registered on the NER in the area(s)
 of practice of Structural Engineering

National Engineering Register

ELEGANT ENGINEERING

SIGN SET OUT FOR XYLEM & GOODMAN



CLIENT APPROVAL

APPROVED FOR PRODUCTION

BY _____ DATE _____

Copyright ©

This design is lent and subject to recall reproduction in any material form is reserved under copyright law.

NOTE TO CLIENT

Please check spelling, dimensions, colours, fixings, specifications, installations etc on this drawing. If in any doubt please contact Insight Signs.

Description:

XYLEM - ILLUMINATED BUILDING SIGNAGE

Drawn by	Quantity	Size	Scale	Date
MB		A3	1:30	28/04/2022

REVISIONS

Revision No.	Date

Job No.

8321

Drawing No.

A2

SIGN GENERAL NOTES

CONSTRUCTION CERTIFICATE

Approved Plans & Specifications
relating to: Date Approved: 23 May 2022
Certificate No.: CC-22071

GENERAL

1. READ THESE DRAWINGS IN CONJUNCTION WITH ALL OTHER CONSULTANT'S DRAWINGS AND SPECIFICATIONS AND WITH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
2. IF IN DOUBT ASK.
3. REFER ANY DISCREPANCY TO THE PROJECT MANAGER BEFORE PROCEEDING.
4. CONSTRUCTION SHALL NOT COMMENCE UNTIL APPROVED BY THE RELEVANT AUTHORITY.
5. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.
6. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS.
7. ALL SETOUT DIMENSIONS SHALL BE VERIFIED BY THE BUILDER ON SITE.
8. ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES U.N.O.
9. THESE DRAWINGS ARE THE COPYRIGHT OF ELEGANT ENGINEERING AND MUST NOT BE USED, REPRODUCED OR COPIED, WHOLLY OR IN PART, WITHOUT THE WRITTEN PERMISSION OF OVERHEAD ENGINEERING. ALL RIGHTS RESERVED.
10. SEPARATE DISSIMILAR METALS USING DOUBLE SIDED TAPE, NEOPRENE PACKERS AND THE LIKE.
11. ALL FIRE REQUIREMENTS TO MANUFACTURERS DETAILS INCLUDING BUT NOT LIMITED TO FLAMMABILITY AND COMBUSTIBILITY.

LOADING

1. WIND LOADS ARE IN ACCORDANCE WITH AS1170.2 AS FOLLOWS (UNO):
IMPORTANCE LEVEL: 2,
ANNUAL PROBABILITY OF EXCEEDANCE: 1 in 500.
TC2.5, Ms=1.0, Ml=1.00, WIND REGION A FOR GENERIC DESIGNS
THE SERVICE WIND SPEED FOR ALL SIGNS HAS BEEN CONSIDERED AS 80km/h

STRUCTURAL STEELWORK

1. ALL WORKMANSHIP AND MATERIALS (INCLUDING ERECTION AND FABRICATION) SHALL BE IN ACCORDANCE WITH AS4100
2. ALL STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING AUSTRALIAN STANDARDS IN RESPECT OF GRADE AND CONDITIONS OF SUPPLY UNO:
ROLLED SECTIONS AS/NZS 3679.1 GRADE 300
WELDED SECTIONS AS/NZS 3679.2 GRADE 300
HOLLOW SECTIONS AS/NZS 1163 GRADE C350
3. CONNECTION CLEATS SHALL BE 10mm THK UNO AND EITHER: (UNO)
AS/NZS 3678 GRADE 250 PLATE
AS/NZS 3679.1 GRADE 300 FLAT BAR

STRUCTURAL STEELWORK BOLTING

4. ALL BOLTS, NUTS AND WASHERS TO BE GALVANISED.
5. BOLTS SHALL BE IN ACCORDANCE WITH AS1110, AS1111 AND/OR AS/NZS1252 AS APPROPRIATE
6. BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH CLAUSE 15.2.3 OF AS4100 AND BOLTS REQUIRING TENSIONING (8.8/TB AND 8.8/TF) SHALL BE INSTALLED IN ACCORDANCE WITH CLAUSES 15.2.4 AND 15.2.5 OF AS4100 USING EITHER THE PART-TURN METHOD OR A DIRECT-TENSION INDICATION DEVICE. THE TORQUE CONTROL METHOD SHALL NOT BE USED.
7. ALL BOLT HOLES SHALL BE 2mm LARGER THAN THE NOMINAL BOLT DIAMETER EXCEPT WHERE SLOTTED OR OVERSIZE HOLES ARE SHOWN ON THE STRUCTURAL STEEL DETAILS. ALL HOLES SHALL COMPLY WITH CLAUSE 14.3.5 OF AS4100. PLATE WASHERS SHALL BE PROVIDED WHERE REQUIRED BY CLAUSE 14.3.5.

STRUCTURAL STEELWORK WELDING

8. ALL WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS1554.1.
9. ELECTRODES SHALL BE TO EITHER AS1153, AS1858, AS2203 OR AS2717.
10. ALL FILLET WELDS SHALL BE 6mm CONTINUOUS CATEGORY SP USING E48XX ELECTRODES OR EQUIVALENT. U.N.O.
11. ALL BUTT WELDS SHALL BE FULL PENETRATION CATEGORY SP TO AS1554.1. U.N.O.

STEELWORK FINISH

12. THE FINISH OF THE STEELWORK TO BE TO THE MANUFACTURERS DETAILS TO ACHIEVE THE DESIGN LIFE REQUIRED BY THE CLIENT.

ALUMINIUM

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1664 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. ALL WELDING SHALL BE IN ACCORDANCE WITH AS1665-2004.
3. UNLESS NOTED OTHERWISE, ALL FILLET WELDS SHALL BE 4mm CONTINUOUS.
4. REFER TO COMPONENT DETAILS FOR ALUMINIUM ALLOY AND TEMPER. WHERE NOT SPECIFIED 6063-T5 HAS BEEN ASSUMED FOR EXTRUSIONS AND 5083-H116 FOR FLAT/PLATE.
5. ALUMINIUM IS TO BE SEPARATED FROM CONCRETE/TIMBER AND OTHER POROUS MATERIALS TO PREVENT DIRECT CONTACT WITH AN INERT LAYER SUCH AS PLASTIC, PAINT, END PLUGS ETC TO THE MANUFACTURERS DETAILS.

PROPRIETY ITEMS

1. PROPRIETY ITEMS SHALL BE INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION U.N.O.
2. FRANGIBILITY PERFORMANCE OF SIGNS WHERE REQUIRED IS TO BE ACHIEVED USING PROPRIETARY PRODUCTS APPROVED BY THE RELEVANT AUTHORITY AND IS EXCLUDED FROM OUR DESIGN AND CERTIFICATION WHICH IS LIMITED TO WIND AND SELF WEIGHT ONLY.

EPOXY ANCHORS

1. ALL EPOXY ANCHORS ARE TO BE HOT DIP GALVANISED UNO
2. THREADED ROD IS TO BE MIN GRADE 4.6 TYPICALLY AND MIN GRADE 5.8 FOR HEAVY DUTY APPLICATIONS UNO.
3. USE STANDARD EMBEDMENT DEPTHS AS FOLLOWS UNO

SIZE	M8	M10	M12	M16	M20	M24
DEPTH	80	90	110	125	170	210

5. CORE DRILLED AND/OR WET HOLES REQUIRE HEAVY DUTY EPOXY.
6. EPOXY SHALL BE AS FOLLOWS INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS:
 - 6.1. STANDARD WHERE NOT OTHERWISE SPECIFIED:
HILTI HY-200
RAMSET CHEMSET 101 PLUS
POWERS KF2 OR AC100e
 - 6.2. HEAVY DUTY:
HILTI HVU
RAMSET REO 502
POWERS PF PRO
 - 6.3. BRICKWORK OR HOLLOW BLOCKWORK SUBSTRATE:
HILTI HY-110
RAMSET CHEMSET 101 PLUS
POWERS KF2 OR AC100e
7. CONCRETE SHALL BE CURED FOR AT LEAST 21 DAYS PRIOR TO INSTALLING EPOXY ANCHORS.
8. EPOXY ANCHORS INSTALLED INTO CONCRETE LESS THAN 21 DAYS OLD SHALL BE RAMSET CHEMSET RE0502 REGARDLESS OF WHETHER ANOTHER PRODUCT HAS BEEN SPECIFIED AND THE CONCRETE SHALL HAVE ACHIEVED A MIN STRENGTH OF 25MPa WHICH CAN BE ACHIEVED USING N40 CONCRETE CURED FOR AT LEAST 7 DAYS.

Brendon Prentice

MIEAust CPEng NER
QLD (13209) NT (239827ES)
VIC (EC45792) TAS (CC7425)
NSW, SA & WA - N/A

Signature: *B. Prentice*

Registered on the NER in the area(s)
of practice of Structural Engineering



National
Engineering
Register

ELEGANT
ENGINEERING

ELEGANT
ENGINEERING

Ph (02) 9674 7601
mail@elegantengineering.com.au
ABN 49 613 740 668

Refer to Design Certificate for address

1 Sign as shown

Date: 10.05.2022

Rev A

