NOTES - GENERAL:

G1. THESE NOTES SHALL BE READ IN CONJUNCTION WITH ALL ENGINEERS, ARCHITECTURAL & OTHER WORKING DRAWINGS, SPECIFICATIONS & WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.

G2. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCOURDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE RELEVANT AUSTRALIAN STANDARS, THE BUILDING CODE OF AUSTRALIA, AND ANY OTHER APPLICABLE AUTORITY REQUIREMENTS.

G3. ANY CONFLICT BETWEEN THESE NOTES, THE SPECIFICATION, THE DRAWING OR ANY OTHER RELEVANT DOCUMENTS SHALL BE REFFERED TO SUITABLY QUALIFIED ENGINEER FOR DECISION PRIOR TO PROCEEDING WITH THE WORK.

G4. DIMENSIONS SHALL NOT BE OBTAINED BY SCAILING THE DRAWING FOR SETTING OUT DIMENSIONS & LEVELS REFER TO ARCHITECTURAL DRAWINGS.

G5. THE BUILDER SHALL BE RESPONSIBLE FOR THE PROVISION OF ALL SHORING TO MAINTAIN THE STABILITY & INTEGRITY ADJACENT STRUCTURES.

G6. DURING CONSTRUCTION IT IS THE BUILDERS RESPONSIBILITY TO MAINTAIN THE STRUCTURE IN A STABLE CONDITION & TO ENSURE NO PART IS OVERSTRESSED:
- INCLUDING SUPPLY AND INSTALLATION OF ALL PROPPING AND TEMPORARY SUPPORT.

G7. ANY SUBTITUTIONS OR ALTERNATIVES MUST BE APPROVED IN WRITING, BY THE ENGINEER, PRIOR TO INSTALLATION.

G8. THE ENGINEER'S ADVICE OR APPROVALS DOES NOT CONSTITUTE APPROVAL OF A VARIATION, UNLESS SPECIFICALLY NOTED AT THE TIME.

G9. ALL PROPRIETARY ELEMENTS SHALL BE SUPPLIED AND INSTALLED IN ACCOURDANCE WITH MANUFACTURER'S SPECIFICATIONS U.N.O.

DESIGN LOADS AND CONDITIONS

L1 SUPERIMPOSED LOADS ARE GENERALLY IN ACCORDANCE WITH AS 1170.

L2 WIND LOADING HAS BEEN ASSESSED TO AS 1170.2 AS FOLLOWS:
- REGION B
- TC = 2.0
- SHIELDING - MS = 1.0
- TOPOGRAPHIC -Mt = 1.0
-IMPORTANCE LEVEL = 2
-DESIGN LIFE = 25 YEARS

L3 THE APPLICABILITY OF THESE LOADS TO SPECIFIC SITES SHOULD BE CONFIRMED BY SUITABLY QUALIFIED ENGINEER

STRUCTURAL STEELWORK

GENERAL:

S1. MATERIAL, FABRICATION & ERECTION SHALL BE IN ACCOURDANCE WITH AS 4100, OTHER RELEVANT AUSTRALIAN STANDARDS & THE SPECIFICATIONS.

S2. ALL WORKSHOP DRAWINGS SHALL BE SUBMITTED TO & APPROVED BY THE ENGINEER PRIOR TO FABRICATION, U.N.O

S3. THE BUILDER SHALL PROVIDE ALL CLEATS & DRILL ALL HOLES NECESSARY FOR FIXING STEEL TO STEEL OR TIMBER.

S4. PROVIDE FIRE PROTECTION TO ALL STEELWORK AS REQUIRED.

STEEL GRADES:

S5. MINIMUM STEEL GRADES SHALL BE AS FOLLOWS U.N.O:
- HOT ROLLED STEEL SECTIONS TO AS/NZS 3679.1 - GR.300 OR SA GR - S355JR
- PLATES AND CLEATS TO AS/NZS 1594 - GR. 250
- HOT ROLLED HOLLOW SECTIONS TO AS 1163 - GR. 350

S6. ALL COLD FORMED SECTIONS SHALL CONFORM TO AS 4600 & BE ROLL-FORMED FROM STEEL STRIP, MINIMUM YIELD STEEL 450MPA, 300 G/M MINIMUM ZINC COATING MASS U.N.O

CONNECTIONS:

S7. FOR BOLTS, THE FOLLOWING NOTATION IS USED:
- 4-M16 4.6/S DENOTES 4 x M16 COMMERCIAL GRADE BOLTS SNUG TIGHT
- 8 - M24 8.8/TB DENOTES 8 x M24 STRENGTH STRUCTURAL BOLTS FULLY TENSIONDED IN A BEARING JOINT

S8. BOLTS IN TB CONNECTIONS SHALL BE TIGHTENED USING THE PART TURN METHOD OR LOAD INDICATING WASHER. CALIBRATED TORQUE WRENCHES SHALL NOT BE USED. A HARDENED WASHER SHALL BE USED UNDER THE BOLTHEAD OR NUT,WHICHEVER IS ROTATED. THE RE-USE FULLY TENSIONED BOLTS IS PROHIBITED.

S9. ALL BOLTS SHALL BE M16 8.8/S & ALL CLEATS & GUSSETSS 10MM PLATE U.N.O

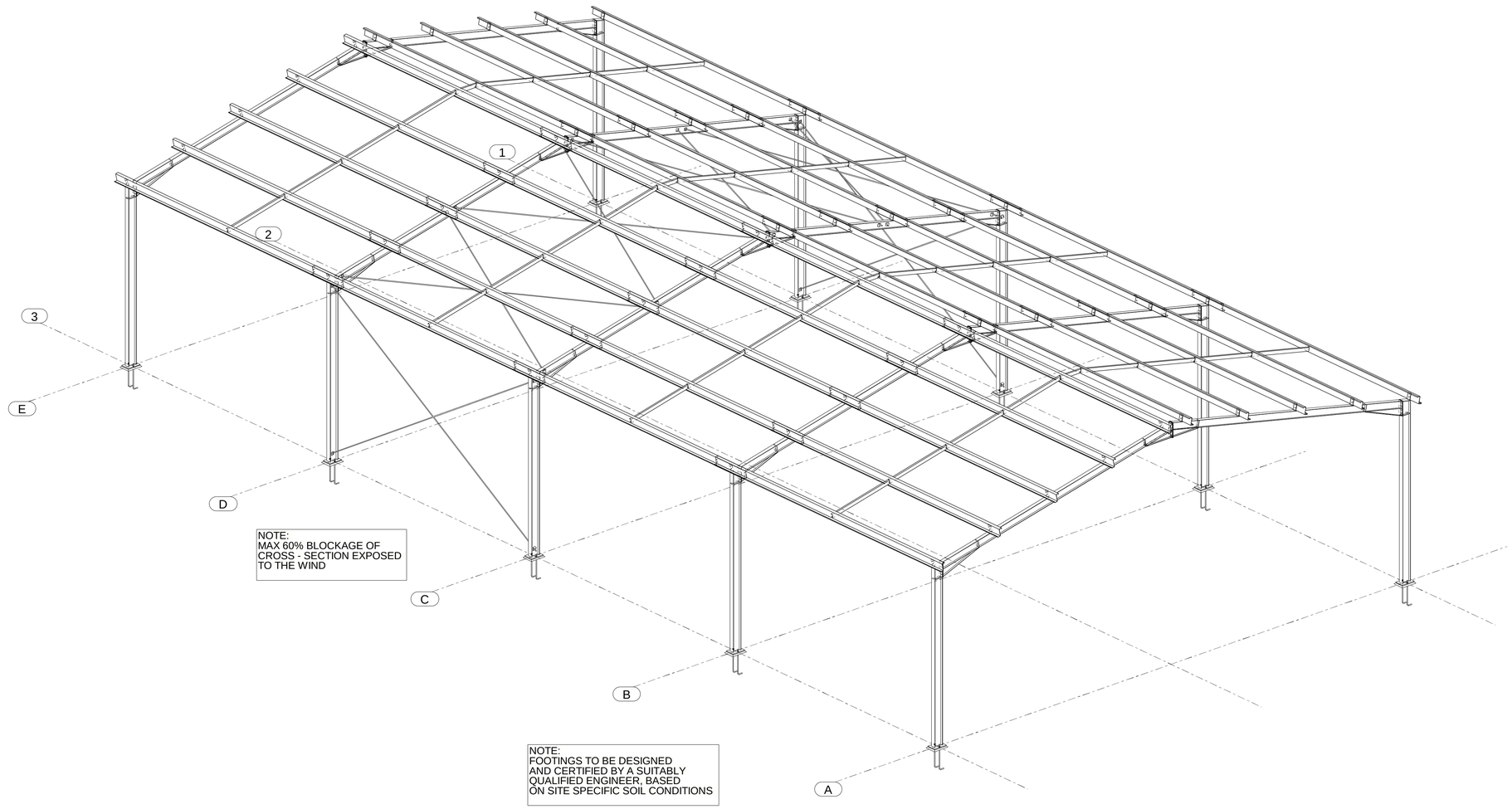
S10. ALL WELDS SHALL BE GENERAL PURPOSE (GP) 6mm CONTINUES FILLET FROM E41XX/W40X ELECTRODES U.N.O WELDING NOTATION AS FOLLOWS:
FSBW - FULL STRENGTH BUTT WELD
CFW - CONTINUES FILLET WELD
IFW - INTERMITTENT FILLET WELD
PPBW - PARTIAL PENETRATION BUTT WELD
GP - GENERAL PURPOSE
SP - STRUCTURAL PURPOSE

S11. ALL BUTT WELD PROCEDURES ARE TO BE QUALIFIED IN ACCOURDANCE WITH AS 1554 U.N.O

S12. PROVIDE HOOK BOLTS TO PURLINS ADJACENT TO BRACING EVERY 2ND PURLIN TO CONTROL BRACE SAG.

S13. SURFACE PREPARATION

EXTERNAL STEELWORK	ABRASIVE BLAST TO AS1627 CLASS 2.5. ONE COAT (75UM) INORGANIC ZINC SILICATE, PLUS ONE COAT (50UM) ACRYLIC GLOSS.
BUILD INTO MASONRY (EXCEPT WHERE MASONRY IS AN INTERNAL SKIN AND PROTECTED BY A DAMPCOURSE	ABRASIVE BLAST TO AS1627 CLASS 2.5. ONE COAT (75UM) INORGANIC ZINC SILICATE, PLUS ONE COAT (50UM) ACRYLIC GLOSS.
OTHER INTERNAL MEMBERS	PREPARED TO CLASS 2 AND PAINTED WITH 1 COAT ALKALOID PRIMER ZINC PHOSPHATE TO A A THICKNESS OF 50 MICROMETERS U.N.O



NOTE:
MAX 60% BLOCKAGE OF CROSS - SECTION EXPOSED TO THE WIND

NOTE:
FOOTINGS TO BE DESIGNED AND CERTIFIED BY A SUITABLY QUALIFIED ENGINEER, BASED ON SITE SPECIFIC SOIL CONDITIONS

3D View

Tekla Structures

Prepared using Tekla Structures® (www.tekla.com)

Model - SEBENZA SHEDS 12 x 24 x 3.9 Z15012

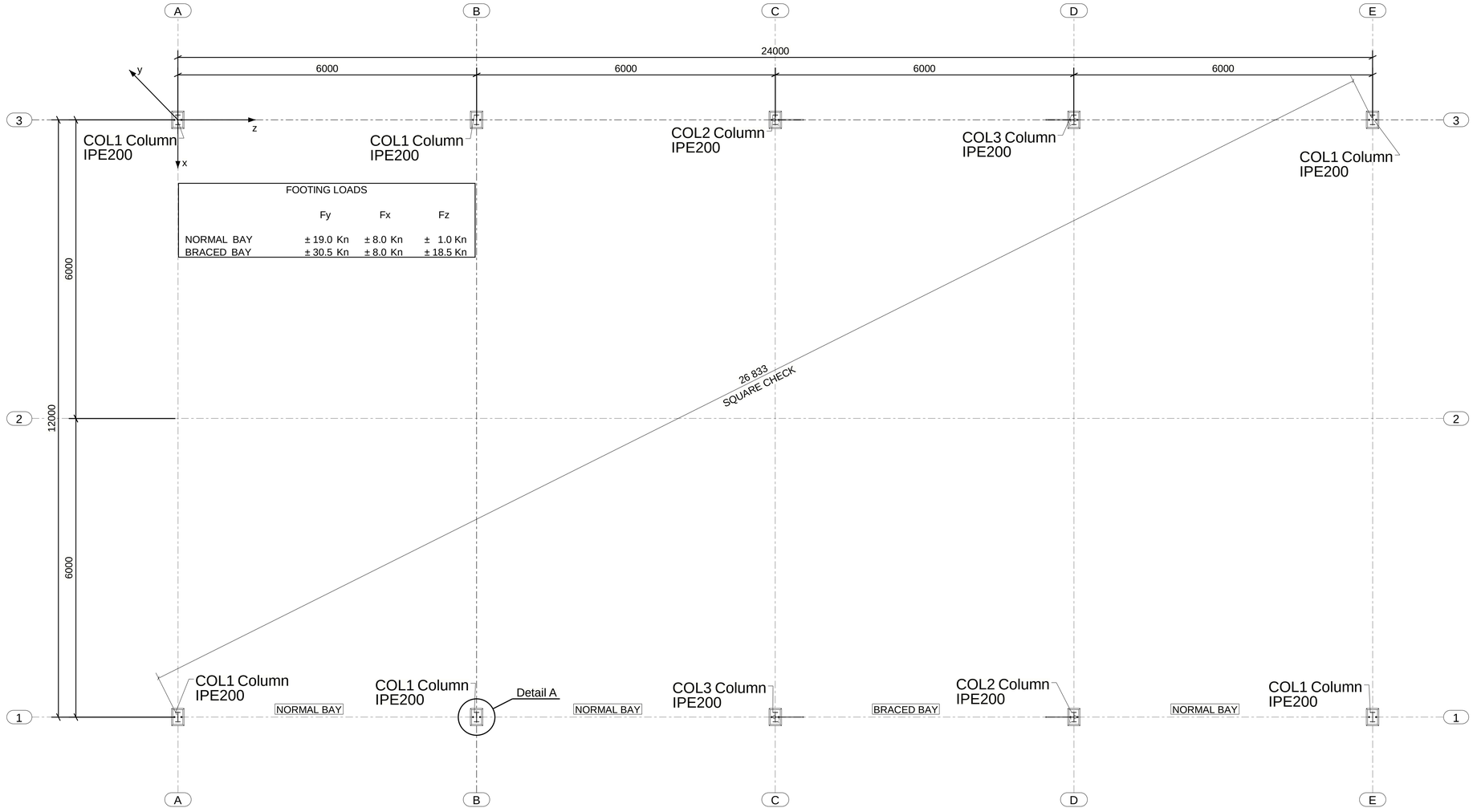
Rev	Mark	Revision Description	Date

sebenza sheds
PORTAL FRAME STEEL SHEDS
Sebenza Sheds Pty Ltd
ABN 27 636 595 125
7 Eton Drive
Oxenford, Qld 4210
Australia
Email: info@sebenzasheds.com.au
Tel: (07) 3102 1179
Website: www.sebenzasheds.com.au

SEBENZA SEDS
12 x 24 x 3.9
Australia

Drawingtitle: 3D VIEW WITH DRAWING NOTES

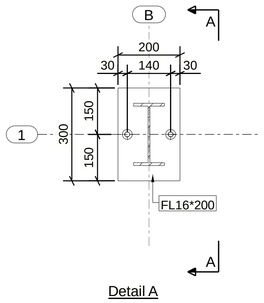
Drawn
Scale 1:50
Issued
Revised 26.08.2021
Project Number 1234
Drawing 12243.9/SO1/6
Rev 8



FOOTING LOADS

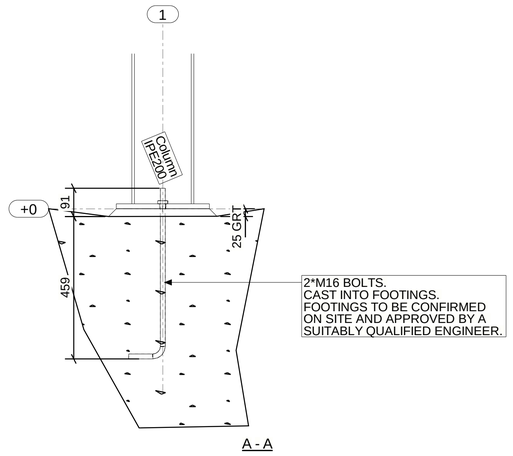
	Fy	Fx	Fz
NORMAL BAY	± 19.0 Kn	± 8.0 Kn	± 1.0 Kn
BRACED BAY	± 30.5 Kn	± 8.0 Kn	± 18.5 Kn

BASE & COLUMN LAYOUT



Detail A

H.D BOLT DETAIL



A - A

Model :- SEBENZA SHEDS 12 x 24 x 3.9 Z15012

Rev	Mark	Revision Description	Date

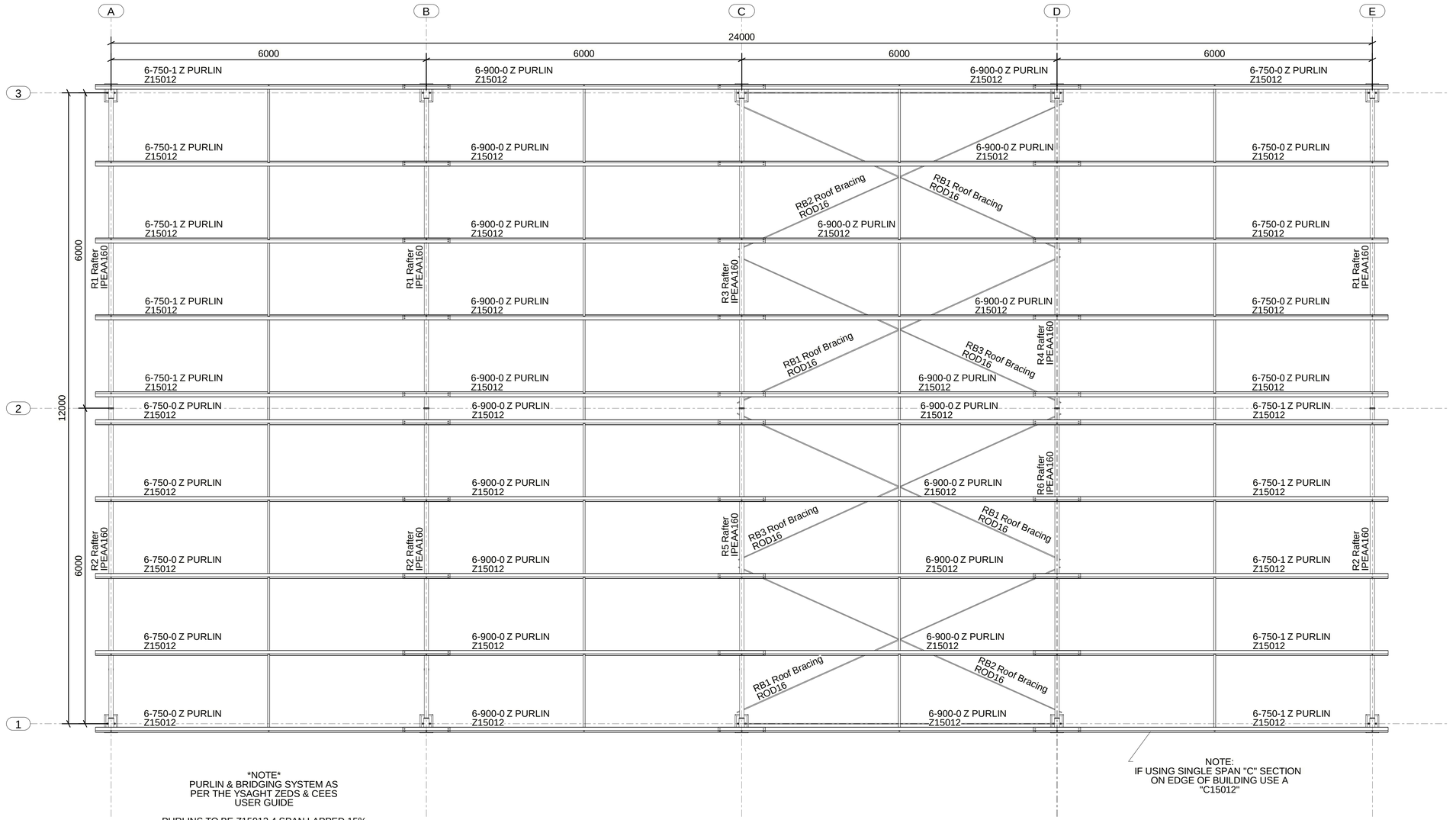
sebenza sheds
PORTAL FRAME STEEL SHEDS
Sebenza Sheds Pty Ltd
ABN 27 636 595 125
7 Eton Drive
Oxenford, Qld 4210
Australia

SEBENZA SEDS
12 x 24 x 3.9
Australia

Email: info@sebenzasheds.com.au
Tel: (07) 3102 1179
Website: www.sebenzasheds.com.au

Description
BASE & COLUMN LAYOUT

Drawn
Scale 1:50 1:10
Issued
Revised 26.08.2021
Project Number
1234
Drawing 12243.9/SO2/6
Rev 8



NOTE
PURLIN & BRIDGING SYSTEM AS PER THE YSAGHT ZEDS & CEES USER GUIDE

PURLINS TO BE Z15012 4 SPAN LAPPED 15% CONTINUOUS Z WITH 1 ROW OF BRIDGING

NOTE:
IF USING SINGLE SPAN "C" SECTION ON EDGE OF BUILDING USE A "C15012"

ROOF PLAN

Model - SEBENZA SHEDS 12 x 24 x 3.9 Z15012

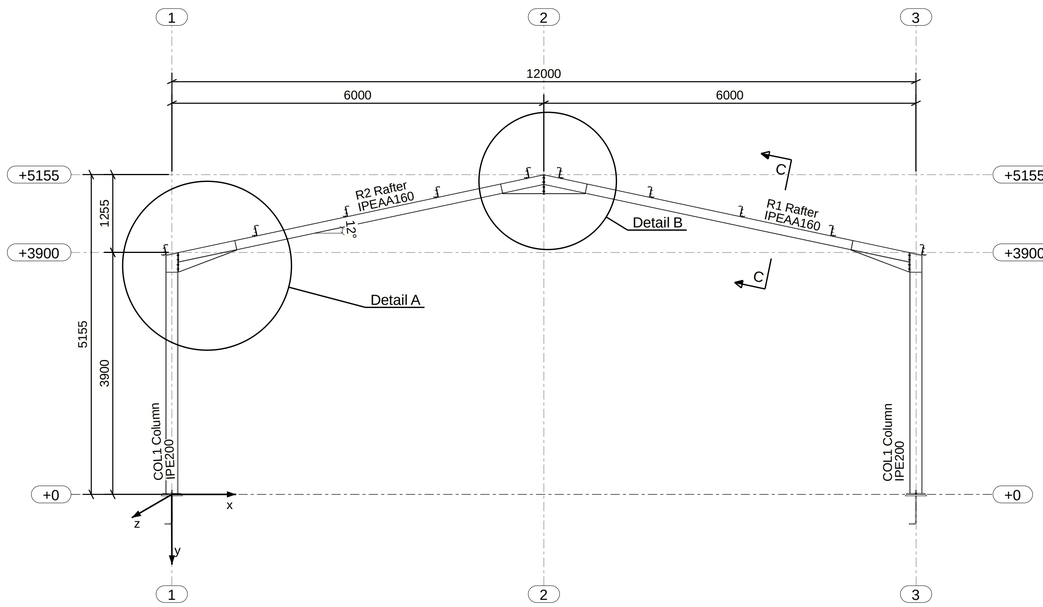
Rev	Mark	Revision Description	Date

sebenza sheds
PORTAL FRAME STEEL SHEDS
Sebenza Sheds Pty Ltd
ABN 27 636 595 125
7 Eton Drive
Oxenford, Qld 4210
Australia
Email: info@sebenzasheds.com.au
Tel: (07) 3102 1179
Website: www.sebenzasheds.com.au

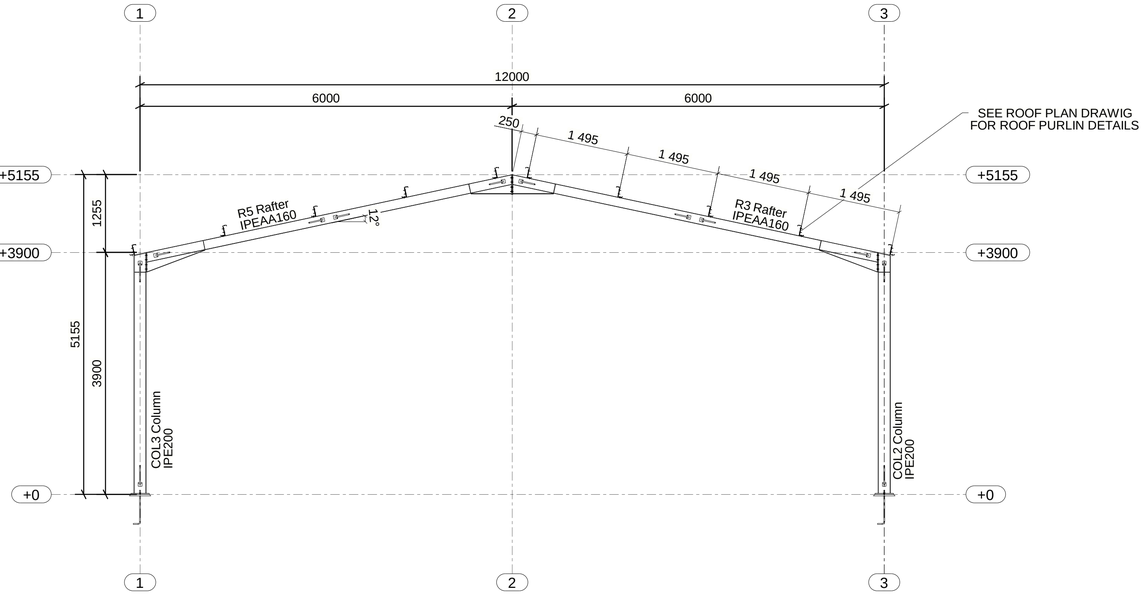
SEBENZA SEDS
12 x 24 x 3.9
Austrailia

Drawingtitle: ROOF PLAN

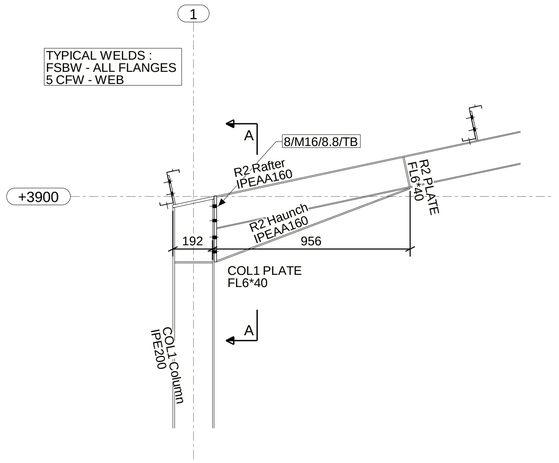
Drawn
Scale 1:45
Issued
Revised 26.08.2021
Project Number 1234
Drawing 12243.9/SO3/6
Rev 8



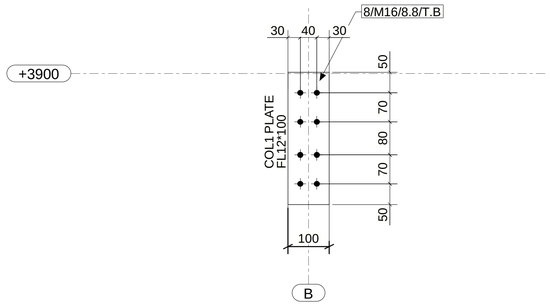
SECTION VIEW GRID B



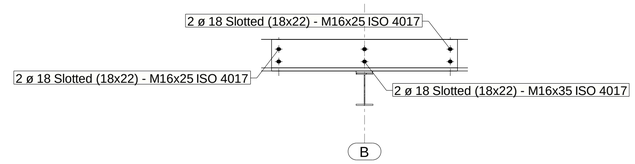
SECTION VIEW GRID C



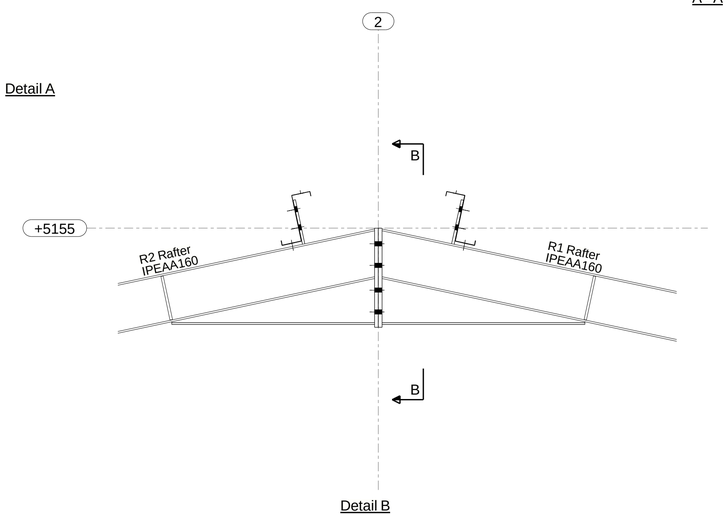
Detail A



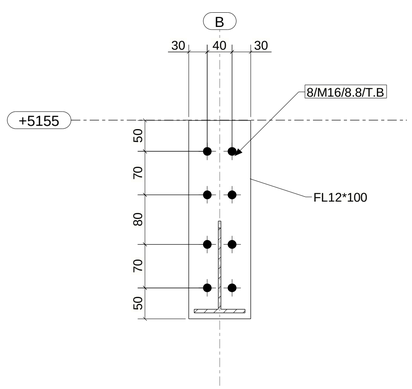
A - A



C - C



Detail B



B - B

Model - SEBENZA SHEDS 12 x 24 x 3.9 Z15012

Rev	Mark	Revision Description	Date

sebenza sheds
PORTAL FRAME STEEL SHEDS
Sebenza Sheds Pty Ltd
ABN 27 636 595 125
7 Eton Drive
Oxenford, Qld 4210
Australia
Email: info@sebenzasheds.com.au
Tel: (07) 3102 1179
Website: www.sebenzasheds.com.au

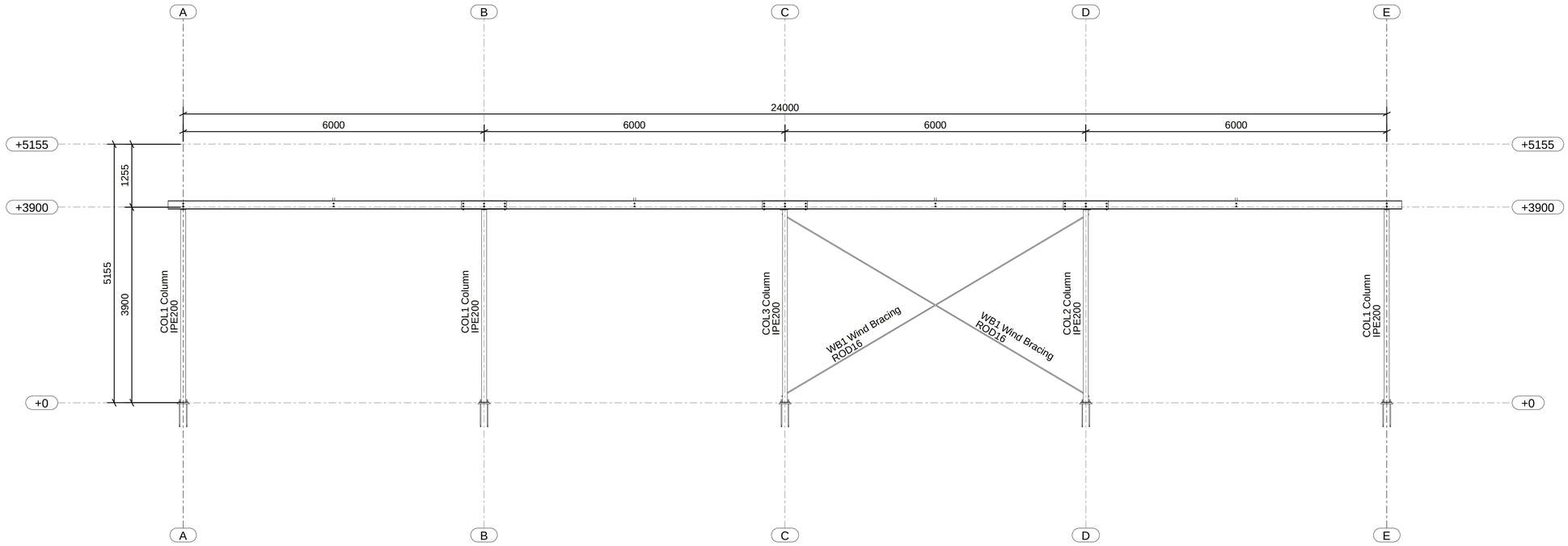
SEBENZA SEDS
12 x 24 x 3.9
Australia

Drawingtitle: SECTION VIEWS GRIDS B & C

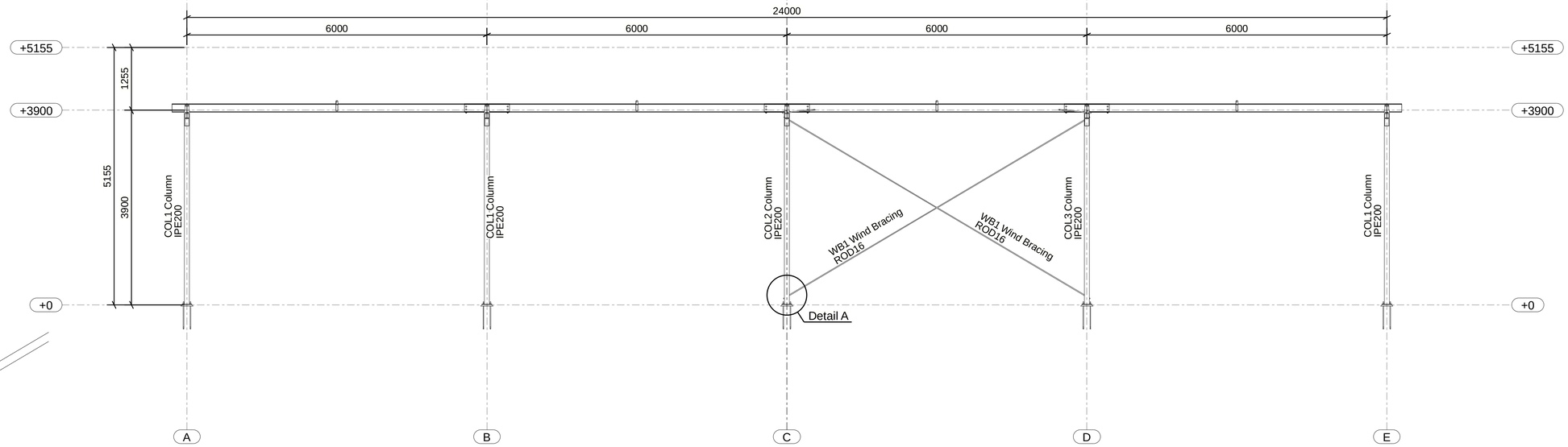
Drawn
Scale 1:7.5 1:5
Issued
Revised 26.08.2021
Project Number 1234
Drawing 12243.9/SO4/6
Rev 8

Tekla Structures

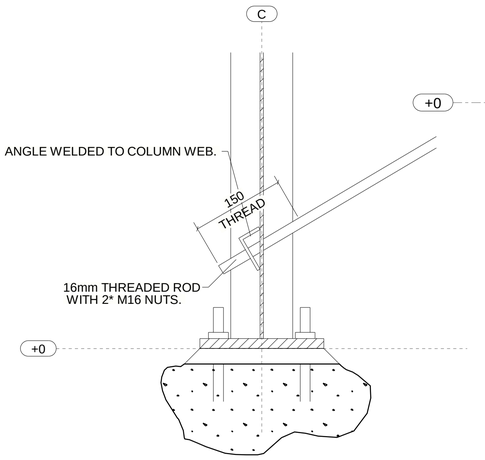
Prepared using Tekla Structures® (www.tekla.com)



ELEVATION VIEW GRID 1



ELEVATION VIEW GRID 3



Detail A

Tekla Structures

Prepared using Tekla Structures® (www.tekla.com)

Model :- SEBENZA SHEDS 12 x 24 x 3.9 Z15012

Rev	Mark	Revision Description	Date

sebenza sheds
PORTAL FRAME STEEL SHEDS

Sebenza Sheds Pty Ltd
ABN 27 636 595 125
7 Eton Drive
Oxenford, Qld 4210
Australia

Email: info@sebenzasheds.com.au
Tel: (07) 3102 1179
Website: www.sebenzasheds.com.au

SEBENZA SEDS

12 x 24 x 3.9

Australia

Drawing Title: ELEVATIONS GRIDS 1 & 3

sebenza sheds
PORTAL FRAME STEEL SHEDS

Drawn
Scale 1:50 1:5
Issued
Revised 26.08.2021
Project Number
1234
Drawing 12243.9/SO5/6
Rev 8

Taylor Civil & Structural
CONSULTING ENGINEERS

Telephone 02-9799 6822
Fax 02-9739 6866

2/187 Concord Road
North Strathfield NSW 2137
admin@taylorcivil.com.au

11 March, 2022

SEBENZA SHEDS PTY LTD
(By email)

Attn: **Sebenza Sheds**

To Whom It May Concern:

RE: STANDARD 12m x 24m x 3.9m STEEL FRAMED SHED (WITH ROOF ONLY) SUITABLE FOR MOST TYPICAL SITES THROUGHOUT AUSTRALIA
STRUCTURAL DESIGN CERTIFICATION – AMENDMENT 3

This is to certify the following:

- That the structural design of the above project has been carried out by appropriately qualified engineers, to comply with relevant Australian Standards and to cater for expected loads and conditions.
- That relevant loadings including winds have been assessed to the criteria noted on the drawings.
- That the structural design complies specifically with the following:
  - Australian Standards – AS1170.1, 1170.2, 4100.
  - Relevant clauses of the Building Code of Australia

The design is represented in the following drawings by Sebenza Sheds:

- 12243.9/ S01/8, S02/8, S03/8, S04/8, S05/8 – Structural works

Note that the following elements, which are to be designed and certified by an Engineer familiar with each site, are excluded from this certification:

- Applicability of the design wind loading to that site
- Footing design

Note that this certification applies only when the "Sheds" are used in the following circumstances:

- The structure is designed as roof-only. If walls are to be added or other alterations made, the design will need to be checked by a suitably qualified engineer.
- A maximum of 60% blockage to the side cross section.
- A maximum point load of 110kg can be suspended from any one portal frame at a time, in any location.

No assurances are given for other circumstances.

If you have any queries regarding this matter, please contact me.

Yours faithfully,

WAYNE TAYLOR, BE (Hons I), MBA, CPEng
Chartered Professional Engineer / Director

Queensland Government

Department of Housing and Public Works

Form 15—Compliance certificate for building design or specification

Version 4 – July 2017

NOTE: This is to be used for the purposes of section 10 of the *Building Act 1975* and/or section 46 of the *Building Regulation 2006.*

RESTRICTION: A building certifier (class B) can only give a compliance certificate about whether building work complies with the BCA or a provision of the Queensland Development Code (QDC). A building certifier (Class B) can not give a certificate regarding QDC boundary clearance and site cover provisions.

1. Property description

This section need only be completed if details of street address and property description are applicable.

E.g. in the case of (standard/generic) pool design/shell manufacture and/or patio and carport systems this section may not be applicable.

The description must identify all land the subject of the application.

The lot and plan details (e.g. SP/RP) are shown on title documents or a rates notice.

If the plan is not registered by title, provide previous lot and plan details.

Street address (include no., street, suburb/locality and postcode)

N/A

Postcode

Lot and plan details (attach list if necessary)

In which local government area is the land situated?

2. Description of component/s certified

Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.

STANDARD 12M X 24M X 3.9M STEEL FRAMED SHED (WITH ROOF ONLY) SUITABLE FOR MOST REGION A & B SITES THROUGHOUT QUEENSLAND

3. Basis of certification

Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon.

This is to certify the following:

- That the structural design of the above project has been carried out by appropriately qualified engineers, to comply with relevant Australian Standards and to cater for expected loads and conditions.
- That relevant loadings including winds have been assessed to the criteria noted on the drawings.
- That the structural design complies specifically with the following:

- Australian Standards – AS1170.1, 1170.2, 4100

- Relevant clauses of the Building Code of Australia

Note that the following elements, which are to be designed and certified by an Engineer familiar with each site, are excluded from this certification:

- Applicability of the design wind loading to that site
- Footings design

Note that this certification applies only when the "Sheds" are used in the following circumstances:

- The structure is designed as roof-only. If walls are to be added or other alterations made, the design will need to be checked by a suitably qualified engineer.
- A maximum of 60% blockage to the side cross section
- A maximum point load of 110kg can be suspended from any one portal frame at a time, in any location.

No assurances are given for other circumstances.

4. Reference documentation
Clearly identify any relevant documentation, e.g. numbered structural engineering plans.

The design is represented in the following drawings by Sebenza Sheds:
- 12243.9/S01/8, S02/8, S03/8, S04/8, S05/8 - Structural works

LOCAL GOVERNMENT USE ONLY

Date received		Reference Number/s	

5. Building certifier reference number

Building certifier reference number
N/A

6. Competent person details
A competent person for building work, means a person who is assessed by the building certifier for the work as competent to practice in an aspect of the building and specification design, of the building work because of the individual's skill, experience and qualifications in the aspect. The competent person must also be registered or licensed under a law applying in the State to practice the aspect.

If no relevant law requires the individual to be licensed or registered to be able to give the help, the certifier must assess the individual as having appropriate experience, qualifications or skills to be able to give the help.

If the chief executive issues any guidelines for assessing a competent person, the building certifier must use the guidelines when assessing the person.

Name (in full)
Wayne Gregory Taylor

Company name (if applicable)
Taylor Civil & Structural

Contact person
Benjamin Dobson

Phone no. (business hours)
(02) 9799 6822

Mobile no.

Fax no.

Email address
admin@taylorcivil.com.au

Postal address
2/187 Concord Road, North Strathfield, NSW

Postcode 2137

Licence or registration number (if applicable)
RPEQ 04632

7. Signature of competent person
This certificate must be signed by the individual assessed by the building certifier as competent.

Signature

Date
11. 3. 2022

The *Building Act 1975* is administered by the Department of Housing and Public Works