

The following information is for a specific production run for containers noted. Dimensions and tolerances may be different for other containers depending on manufacturer, design specs, age, etc.

TECHNICAL SPECIFICATION

FOR

40' X 8' X 8'6" ISO 1AA TYPE
STEEL DRY CARGO CONTAINER

WITH

ALL SPA-H

WITH

CORRUGATED DOOR
CORRUGATED ROOF
GOOSENECK TUNNEL
2 VENTILATORS
PLYWOOD FLOOR

FOR

CARU

SPECIFICATION NO.:	SP-CARF-40
G. A. DRAWING NO.:	CAR-F-1000
MODEL NO. :	(as per each factory)
ISSUE ON :	December 15, 2005
CONTAINER NO. :	CARU 472000-472299

SCOPE

This specification covers the design, construction, materials, testing, inspection and performance requirements for ISO, 1AA type steel dry cargo containers

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The containers specified herein are manufactured under the quality control of FACTORY within the perimeters as such set forth by the Classification Societies.

CONTENTS

1.	GENERAL-----	3—4
2.	DIMENSIONS AND RATINGS-----	4—5
3.	MATERIAL AND CONSTRUCTION-----	5-11
4.	SURFACE PREPARATION AND PROTECTION-----	11
5.	MARKINGS-----	11-12
6.	TESTING AND INSPECTION-----	12
7.	WARRANTY-----	12-13
8.	SUPPLIER -----	13

APPENDIX

A.	MATERIAL LIST OF MAIN STEEL PARTS-----	14
B.	TESTING ITEMS, LOADS AND CRITERIA-----	15— 16

1. GENERAL

1.1 Operational Environment

The container is designed and manufactured for the carriage of general cargo by marine, road, and rail. It is designed to maintain its structural and weathertight integrity within a temperature range of -30 °C to 80 °C.

1.2 Regulations and Standards

The container will conform to and satisfy the following standards.

1.2.1 ISO/TC-104

All to meet series 1 freight containers set forth.

ISO 830 ----- Freight containers-Terminology.

ISO 668 ----- Series 1 freight containers-Classification, external dimensions and ratings.

ISO 6346 ----- Freight containers-Coding, identification and marking.

ISO 1161 ----- Series 1 freight containers-Corner fittings-specification.

ISO 1496-1 ----- Series 1 freight containers-Specification and testing-
Part 1 : General cargo containers

1.2.2 T.I.R. Requirements and Certifications

The container shall comply with the customs convention of containers, 1972 and all subsequent revisions to date and will be identified with appropriate approval plates and markings.

1.2.3 Timber Component Treatment and Certification

All exposed timber components are treated with an Australian government approved insecticide and the container will be such identified with appropriate immunization plate.

1.2.4 U.I.C. Registration

The container will be registered and comply with the International Union of Railways (UIC) code 592-1 OR and 592-2 OR.

1.2.5 CSC Requirements

The container will comply with the rules set forth in the International Convention for Safe Containers and will be so identified with a plate.

1.2.6 Classification Society (**ABS**)

The container will be certified by classification society in design and individually during its production.

1.3 Handling

The container will be constructed to be handled under the following conditions without distortion or effect on its structural integrity:

- A. Lifting full by its top corner fittings by means of spreaders
- B. Lifting full by its bottom corner fittings by means of fitting at a sling angle of 30 degrees.

1.4 Transportation

The container will be constructed to be suitable for transportation in normal operating conditions by modes of:

- A. Marine - Five (5) high stacked on deck or seven (8) high stacked in cell guided by vertical or diagonal lashings
- B. Rail - on flat or container car secured at its bottom corner fittings
- C. Road - on flat or chassis secured at its bottom corner fittings

2. DIMENSIONS AND RATINGS

2.1 Dimension

Title		40'
External (mm)	Length	12,192 (0, -10)
	Width	2,438 (0, -5)
	Height	2,591 (0, -5)
Internal (mm)	Length	12,032 (0, -10)
	Width	2,352 (0, -5)
	Height	2,393 (0, -5)
Door opening (mm)	Width	2,340 (0, -5)
	Height	2,280 (0, -5)

2.2 Diagonal Difference

Diagonal tolerance of front and rear frames should be less than 10 MM

Diagonal tolerance of side and roof panels should be less than 19 MM

2.3 Internal Capacity

67.8 CU.M. (2,394 CU.FT.)

2.4 Gooseneck Tunnel

Length 3,316 mm
 Width 1,029 (+3, 0) mm
 Height 120 (0, -3) mm

2.5 Ratings

Title	KGS	LBS
Max. Gross Weight	30,480	67,200
Tare Weight ($\pm 2\%$)	3,800	8,380
Max. Payload	26,680	58,820

2.6 Corner Protrusions

- 2.6.1 The faces of the bottom corner fittings protrude from lowerfaces of all transverse members in the base of the container by 17 MM (+0.5,-6.0 MM).
- 2.6.2 The upper faces of top corner fittings protrude from upper faces of the highest point of the roof by 6 MM.
- 2.6.3 The outer side faces of corner fittings protrude from outside faces of corner posts by 3 MM.
- 2.6.4 Under 1.8 x max. gross weight no part of the base will protrude more than 6 MM below the bottom corner fittings.

3. MATERIAL AND CONSTRUCTION**3.1 General**

The container is mainly constructed with steel frames, corrugated panels welded by CO₂ shielded Arc welding. All welds of the exterior including the base frames are continuous with full penetration. Wooden floor is fixed to the cross members by self-tapping screws. All crevices will be sealed with elastic sealing compound.

3.2 Materials

The main constructional materials are shown in Appendix A of the specification.

3.3 Corner Fittings

All corner fittings used will comply with ISO/1161 standard.

3.4 Base Structure

The base structure will be composed of two (2) bottom side rails, a number of crossmembers and one set of gooseneck tunnel and outriggers, which are welded together as a sub-assembly.

3.4.1 Bottom Side Rail

Each bottom side rail is built of a steel pressing made in one piece. The bottom flange face outwards so as to be easily repaired and hard to corrode.

Qty. : 2 pcs
 Shape : Channel section
 Dimension : 158 x 50 x 30 x 4.5 mm

3.4.2 Crossmember

The crossmembers are composed of a number of small pressed channel section and some large one located beneath each board joint of the plywood, which are placed at certain center distance. There are 3 pcs of t4.0 stiffeners in each joint member.

Shape : "C" section		
Small one :	122 x 45 x 40 x 4.5 mm,	Qty. : 26 pcs.
Large one :	122 x 75 x 40 x 4.5 mm,	Qty. : 3 pcs.
Stiffener :	4.0 mm thick,	Qty. : 9 pcs.

3.4.3 Gooseneck Tunnel

The gooseneck tunnel consists of one piece pressed hat section tunnel plate, a number of pressed channel section tunnel bows, one box (or welded box) section rear bolster and tunnel outriggers. The gooseneck tunnel is designed according to ISO standard :

- a) Tunnel plate : 4.0 mm thick, Qty. : one piece.
- b) Tunnel bow : 4.5 mm thick, Qty. : 12 pcs.
- c) Bolster : 150 x 100 x **4.5** mm, Qty. : one piece.
- d) Outriggers : **4.5** mm thick, Qty. : 8 pcs / each side, total : 16 pcs.

3.4.4 Floor central rail

A 4.0 x 50 mm flat bar **hot-dipped galvanized 55 microns** will be loosely placed on top of the crossmembers to support the floorboards at the center.

3.4.5 Floor retainer

A number of 25 x 25 x **3.0** mm thick angle steel will be placed beside the bottom side rails on the crossmembers to support the floorboards.

3.4.6 Base Gusset

Four corner gussets, t4.0 x 200 mm thick protection plates will be welded from side rail to corner fittings.

3.5 Front End

The front end will be composed of front end frame and corrugated end wall, which are welded together as a sub-assembly.

3.5.1 Front End Frame

The front end frame will be composed of two corner posts, one top end rail (sub-assembly), one bottom end rail and four corner fittings.

3.5.1.1 Front Corner Post

Each corner post is made of a 6.0 mm thick section steel pressing to ensure the suitable strength, light-weight and easy maintenance.

3.5.1.2 Top End Rail (sub-assembly)

The front top end rail is constructed with steel square tube lower part and steel plate upper part. The upper part is extended inwards of the container certain distance with full width from front part of top corner fittings.

Lower rail : 60 x 60 x 3.0 mm

Upper part : **3.2** mm thick

3.5.1.3 Bottom end rail

The bottom end rail consists of two longitudinal end protectors and a square tube on top with flat strips as the wood supports. Two bottom corner protectors are provided adjacent to the bottom fitting to prevent damage due to any twistlock misalignment.

Longitudinal end protectors: 9.0 mm thick, Qty. : 2 pcs.

Square tube : 60 x 60 x 3.0 mm

Flat strips : 4.0 mm thick, Qty. : 2 pcs.

Bottom corner protectors : 9.0 mm thick, Qty. : 2 pcs.

3.5.2 Front End Wall

The front end wall is composed of steel sheet fully vertically corrugated into trapezium section, butt joint together to form one panel by means of automatic welding.

Front end wall thickness: 2.0mm

Corrugation dimension – Depth : 45.6 mm

Outerface : 110 mm

Interface : 104 mm

Slope : 18 mm

Pitch : 250 mm

3.6 The Rear Frame

The rear frame consists of one door header, one door sill, four corner fittings and two corner posts.

3.6.1 Rear Corner Post

Each corner post is constructed from an inner part of channel shaped hot-rolled section steel and an outer part of steel pressing, welded together to form a hollow section to ensure the door opening and suitable strength against the stacking and racking force. Four (4) sets of hinge pin lugs are welded to each outer part of the corner post.

Inner part : 113 x 40 x 12 mm

Outer part : **6.0** mm thick

3.6.2 Door Header

The door header is constructed from a lower part of a "U" shaped steel pressing with internal stiffener ribs at the location of the cam keeper's backside and an upper part of steel pressing rear header plate, they are welded together to form a box section to provide a high rigidity.

Rear header : 4.0 mm thick

Header plate : **4.5** mm thick
 Rib : 4.0 mm thick, Qty. : 4 pcs.

3.6.3 Door Sill

The door sill is built of a special channel section steel pressing with internal ribs as stiffeners at the backside of each cam keeper. The upper face of the sill has a slope for better drainage and the highest part is on the same level to the upper face of the wooden floor. Two channel section steel recesses (**must be grind in smooth radius of 8mm**) are provided adjacent to the bottom fitting to prevent damage due to any twistlock misalignment.

Door sill : 4.5 mm thick, Slope : 10 mm
 Stiffener ribs : 4.0 mm thick, Qty. : 4 pcs.
 Channel section : 200 x 75 x 9.0 mm

3.7 Side Wall Assembly

The side walls will be continuously welded to each other and to the side rails and corner posts. Welding penetration side panels to rails should be min.75%.

3.7.1 Top Side Rails

Each top side rail is used a square steel pipe. Rail : 60 x 60 x 3.0 mm

3.7.2 Side Walls

Each side wall will be composed of a number of sheets for the intermediate (inner) parts and outer panels at each end of side wall, fully vertically corrugated into trapezium section, butt welded together to form one panel by automatic welding.

Trapezium – Depth : 36 mm
 Outerface : 72 mm
 Interface : 70 mm
 Slope : 68 mm
 Pitch : 278 mm
 Inner panel : 1.6 mm thick, Qty. : 9 pcs / each side.
 Outer panel : **2.0** mm thick, Qty. : 2 pcs / each side

3.8 Roof

The roof will be constructed by several die-stamp corrugated steel sheets with a certain upwards camber at the center of each trough and corrugation, these sheets are butt jointed together to form one panel by automatic welding.

Corrugation shape – Depth : 20 mm
 Outerface : 91 mm
 Interface : 91 mm
 Slope : 13.5 mm
 Pitch : 209 mm
 Camber upwards : 5 mm
 Panel thickness : 2.0 mm
 Sheet Qty. : 11 pcs

3.8.1 Roof Reinforcement Plate

Four reinforcement plates shall be mounted around the four corner fittings.

dimension : 300 x 270 x **4.0** mm

3.9 Door

The door consists of two door leaves, each leaf with two locking devices, four hinges, seal gaskets and door holders.

3.9.1 Door Leaf

Each leaf consists of door panel, steel door frame which consists of vertical (inner & outer) and horizontal (upper & lower) members. They are welded together to form the rectangular door leave.

3.9.1.1 Door panel : With **5** corrugations.

Panel thickness : 2.0 mm
Depth : 36 mm
Interface : 70 mm
Slope : 68 mm

3.9.1.2 Door frame : a) Vertical door member : 100 x 50 x 3.2 mm (inner & outer)

b) Horizontal door member : Channel section, **150 x 50 x 46 x 3.0** mm.

3.9.1.3 Each door is capable of swinging 270 degrees when fully opened and can be secured in that position by means of nylon ropes attached.

3.9.1.4 The right door is so designed that the right door must be opened before the left in compliance with T.I.R. requirements.

3.9.1.5 The bottom cover plates of all door edge members must be provided with a drain hole of $\varnothing 7$ mm.

3.9.2 Door gasket

The door gasket is of extruded EPDM with a double lip to ensure water tightness. The upper and side gaskets are of 'J' type configuration. Bottom is of a 'C' type configuration. It is attached with sealant and secured with stainless steel retainers by stainless steel blind rivets.

3.9.3 Hinges and Pins

Each door is suspended by four hinges with stainless steel pins, nylon bushings and **stainless steel** washers placed at the hinge pin lugs of the rear corner posts.

3.9.4 Locking Devices

Galvanized locking devices (**Hot-dipped galvanized 75 microns**) on a galvanized 34 MM dia. pipe are secured to the door with **huck bolts** and has nylon bushings on the brackets. The Locking devices will be installed after the container is painted.

3.9.5 Door Holder and Receptacle

A door holder per door, made of mixed nylon rope, is tied by **double knot** to the center-side locking rod and the receptacle (hook type) is welded to each bottom side rail to retain the door at the open position.

3.10 Floor

3.10.1 The Floor Boards

The floor consists of plywood. The plywood used will be certified to meet the requirements of Australian Commonwealth Dept. of Health (Plant Quarantine Treatment Schedule) for Timber Components (T.C.T.). The floor dimension should according to the IICL dimension standard. The plywood thickness is 28 mm.

3.10.2 Arrangement and Fixing

The plywood boards are longitudinally laid on the crossmember with a pre-blasted painted and free floating flat steel at the center and two angle steel along both side rails. The plywood boards are tightly secured to each crossmember with countersunk self-tapping electro-zinc plated steel screws **and its top surface should be coated with varnish**. These heads of the floor screws are countersunk below the level of the upper surface of the floor by 2.0 mm to 2.5 mm.

Screws : M8 x 45 x \varnothing 16(Head) mm

Screws' Qty. : 6 pcs / end row and joint, 3 pcs / outrigger, 4 pcs / other.

3.10.2 The plywood used will be a minimum of 19 plies and will be:

- A. Hardwood of a specific gravity range of 0.7-0.85 at a moisture content of 12%. E.G. Keruing, Apitong.
- B. Moisture content will be 13-15% when fitted to the container.

3.11 Sealing

1. Each perimeter of the floor;
2. All the overlapped joints of inside;
3. All the holes for bolts and nuts;
4. Three sides of CSC plate and ventilators;
5. Between door gasket and door panel at 305 mm above lower gasket;
6. Details refer to the application of sealant drawing CARF-1001.

Note: The application of interior sealant will be put on after water testing.

Sealant Materials : a. Chloroprene (Cargo contact area)
b. Butyl (Hidden parts)
c. Silicon (apply to CSC plate **and ventilators**)

3.12 Special Features

3.12.1 Shoring Slots: 60x40 MM slots are provided for on each of the rear corner posts so that a 2" thick batten can be secured to give protection against shifting cargo.

3.12.2 Lashing Rings and Lashing Bars

- 1) Lashing rings are welded to each bottom and top side rail at corresponding recessed area of side wall.

Lashing ring Qty. / each bottom or top side rail : 10 pcs , total : 40 pcs.

- 2) Lashing bars are welded on each front & rear corner post slot.

Lashing bars Qty. / each front & rear corner post : **3** pcs, total : **12** pcs.

- 3) Capabilities of pull load of every lashing point are as following:

Lashing rings on the side rails : 1,500 kg / each

Lashing bars on the corner posts: 1,500 kg / each

- 3.12.3 Ventilators – Two (2) ventilators should be small type fabricated from A.B.S. resin by injection molding process. They will be secured to the panel recess from right corner post of both side walls, by means of three (3) Aluminum Huck bolts.

3.12.4 Customs Seal Provision

Customs seal provision are made on each locking handle and retainer in accordance with TIR requirements.

4. SURFACE PROTECTION

4.1 Surface Preparation

All steel components, prior to forming, will be shot-blasted to a SA 2.5 standard surface by means of an automatic centrifugal shot surface cleaning machine. A weld-able primer compatible to the paint system will be applied immediately to a thickness of 10 micron to preserve the surface integrity during the assembly process. After the container is assembled it is shot-blasted again manually to clean all the welds and any other area that was contaminated during the assembly process. Slags and spatters are removed by means of grinding or needle hammers.

4.2 Paint Supplier: Chugoku

Exterior: RAL 3004

Apply one coat of zinc rich primer to **30** mic. DFT.

Apply one coat of epoxy primer to **40** mic. DFT.

Apply one coat of Acrylic top coat to **40** mic. DFT. (**50 for roof**)

Total **110** mic. DFT. (**120 mic. DFT for roof**)

Interior: RAL 3009

Apply one coat of zinc rich primer to **30** mic. DFT.

Apply one coat of epoxy top coat to **45** mic. DFT.

Total **75** mic. DFT.

Note: The gloss ratio is 25% of exterior paint.

4.3 Undercoating

The whole underside will be coated with **30** mic. of zinc rich primer and **200** mic. of Waxy or Bituminous undercoating.

Total **230** mic. DFT.

5. MARKING

5.1 Lettering

The container will be marked in accordance with ISO requirements, owner's specifications, and other regulatory authorities.

5.2 Materials

The decals are **cast vinyl** of a self adhesive type and are warranted for seven (7) years against normal wear and tear. All data plates will be stainless steel and secured by stainless steel blind rivets and sealed with silicon sealant.

5.3 Plating and Stamping

5.3.1 **The owner's serial number and manufacturing number will be die-stamped with 10 mm high characters to the top of LH and RH rear bottom corner fittings respectively.**

5.3.2 Chemically etched stainless steel plates (Consolidated data plate i.e. TIR, CSC, TCT) will be permanently riveted with stainless steel blind rivets and sealant will be applied around these plates.

6. TESTING AND INSPECTION

6.1 Materials and Parts Inspection

All materials and parts are inspected by the manufacturer's Quality Control department to ensure they are up to the specification called for in the design.

6.2 Production Line Quality Control

All containers are manufactured under effective quality control procedures to meet the specified standards. All dimensions are checked and smooth operation of the doors are ensured after each container's completion. A light and watertight test is conducted on all containers.

Quality control personnel independent of the production dept. will be inspecting on all phases of the production as well as ad hoc inspections by the classification society's surveyor and buyer's representatives to assure the quality of the container.

7. WARRANTY

7.1 Guarantee

The guarantee period will commence the day after the certification is issued by the classification society.

7.2 Paint Guarantee

The application of paint will be guaranteed against corrosion and paint failure for a period of five (5) years. The guarantee is for all faults affecting more than 10% of the painted surfaces and will assure partial or total re-painting of the containers. Normal wear/tear, or corrosion caused by acid, alkali or results of damages by abrasion, impact or accident are excluded.

Note: Corrosion is defined as rusting which exceeds RE3 (European scale of degree of rusting) on at least ten (10) percent of the total container surface coated with the concerned coating system.

7.3 Other Guarantee

This container will be guaranteed against any defects or omissions in constructions, workmanship and materials for a period of **two (2)** year. In the event of defects, FACTORY will replace, correct or install to make the container satisfactory to this specification and its intended service at FACTORY's expense. Any damages caused by mis-handling, mis-securing, mis-loading, impact and any natures of accidents are excluded.

8. SUPPLIER**8.1 Approval Supplier List**

MATERIALS	SUPPLIERS	REMARKS
LOCKING DEVICE	SCI8568MN OR OTHERS EQUAL TO BE 2566MN	SECURE CAM/KEEPER AT T.I.R. LOCKING BAR
PAINT	CHUGOKU	
UNDERCOATING	LVAN 512; ACST 8508; DINITROL 4941K; TECTYL 121B etc.	
MARKING	OCEAN SHINE	

APPENDIX A

Material list for main steel parts:

YP = YIELD POINT (KG/MM²)

E = ELONGATION %

TS = TENSILE STRENGTH (KG/MM²)

FRONT PANEL)	JIS: SPA-H OR EQUIVALENT
FRONT TOP RAIL)	YP=35 TS=49 E=22
FRONT CORNER POST)	
FRONT BOTTOM RAIL)	
REAR CORNER POST-OUTER)	
DOOR PANEL)	
DOOR HEADER)	
DOOR RAIL)	
DOOR EDGE MEMBER)	
DOOR SILL)	
SIDE PANEL)	
TOP SIDE RAIL)	
BOTTOM SIDE RAIL)	
ROOF PANEL)	
CROSS MEMBER)	
REINFORCEMENT PLATE)	
GOOSENECK TUNNEL)	
TUNNEL OUTERIGGER)	
TUNNEL BOLSTER)	
FLOOR SPACER)	
DOOR SEAL RETAINER)	STAINLESS
CONE DAMAGE PROTECTOR)	JIS: SS41 HOT ROLLED SHAPED STEEL YP=25 TS=41 E=21
REAR CORNER POST-INNER)	JIS: SM50YA HOT-ROLLED HI-TENSILE SHAPED STEEL YP=37 TS=50 E=15 OR SS50 HOT-ROLLED HI-TENSILE SHAPED STEEL YP=29 TS=50 E=19
LOCKING BAR)	JIS: STK41 YP=23 TS=41 E=23
CORNER FITTING)	JIS: SCW49 MOD. WELDABLE CASTING YP=28 TS=49 E=20
DOOR HINGE)	JIS: S25C FORGING STEEL YP=23 TS=44 E=20
DOOR LOCKING CAM AND KEEPER)	JIS: S20C FORGING STEEL YP=23 TS=44 E=19

APPENDIX B

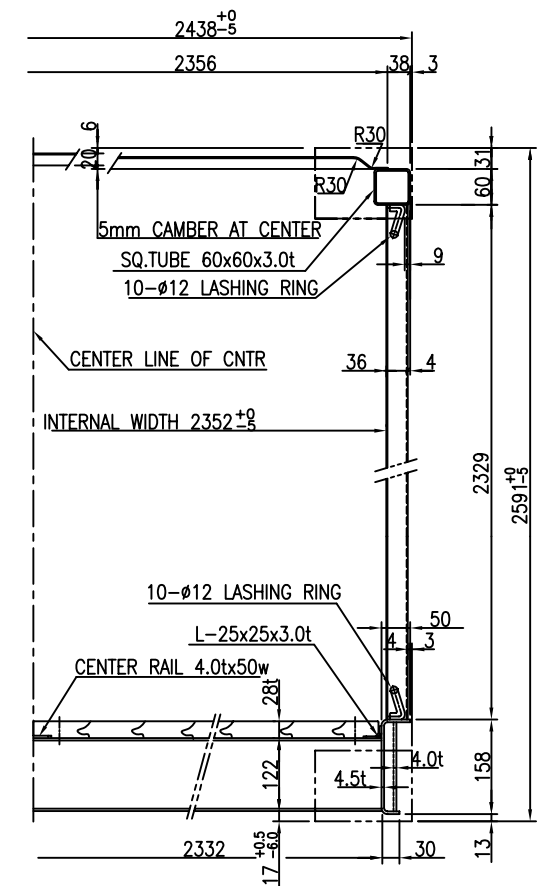
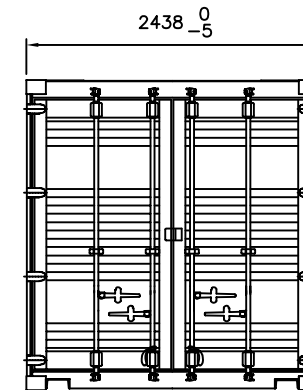
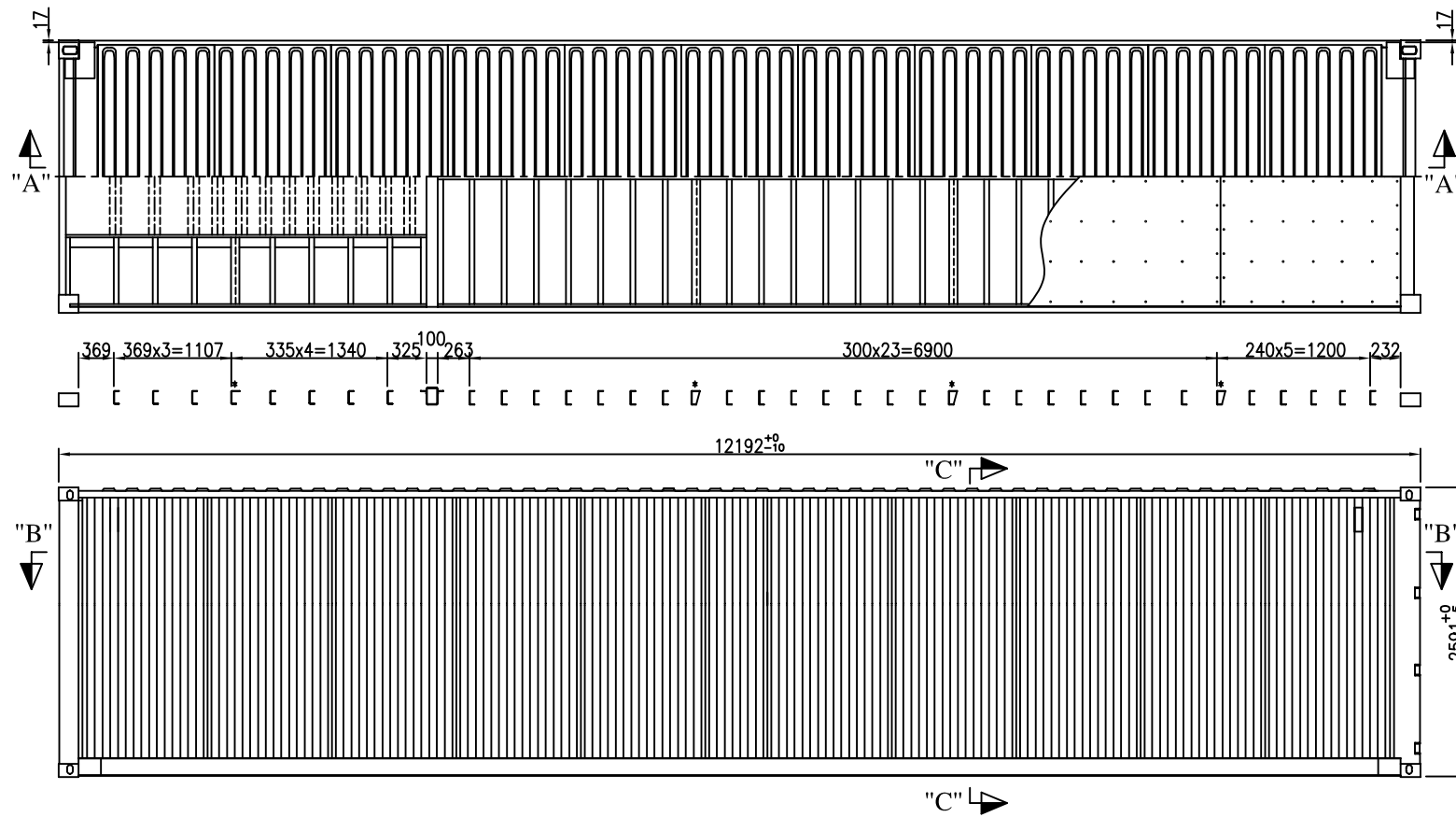
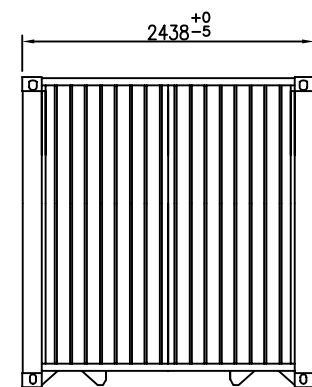
TESTING ITEMS, LOADS AND CRITERIA

NOTE: Figures in brackets of "residual deformation" column show the total residual deformation after completion of the series tests 1, 2A, 2B, 2C, 3, and 6

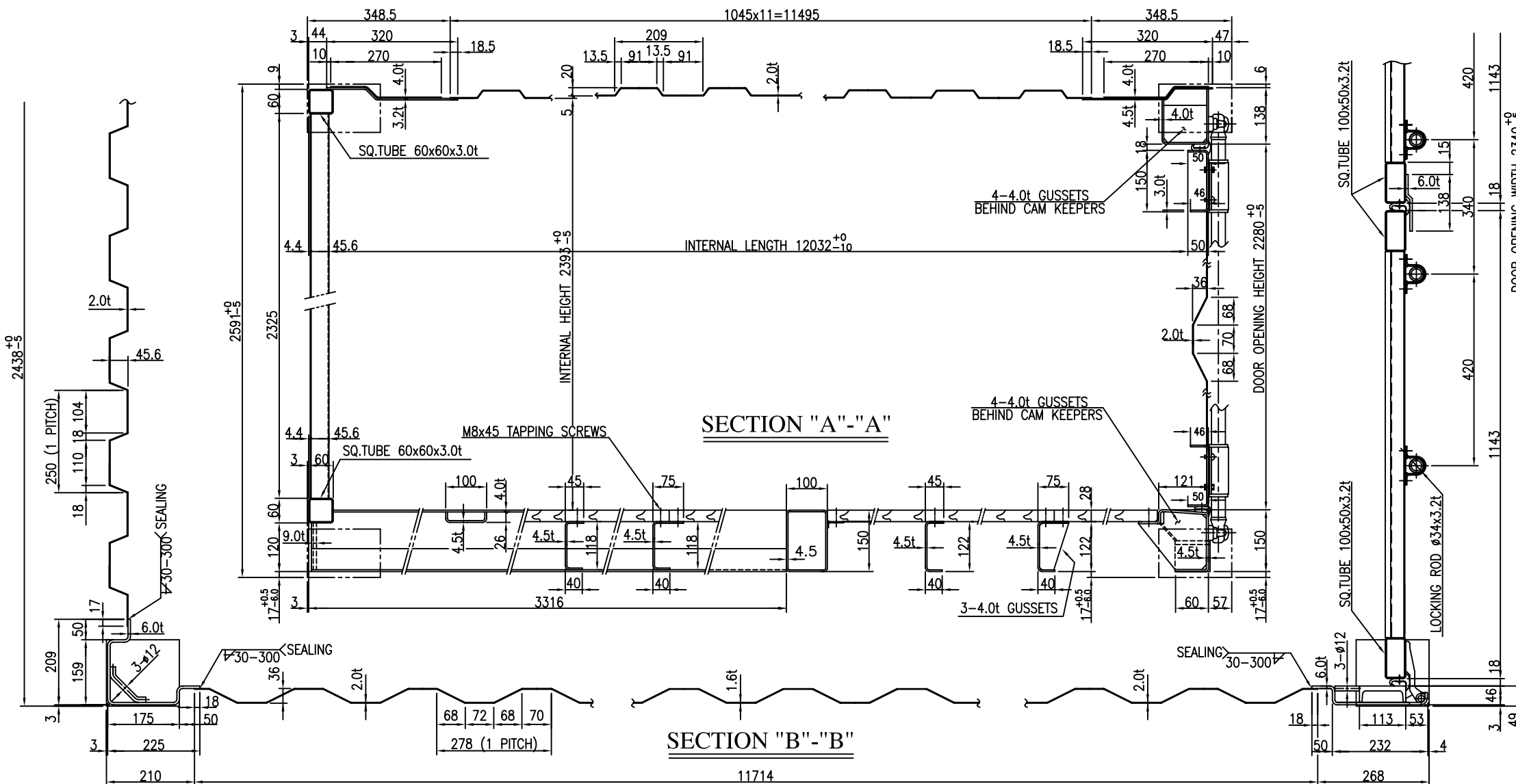
R: Gross Weight 30,480 KG
 P: Payload **26,680 KG**
 T: Tare Weight **3,800 KG**
 *Measured from the plane of bottom corner fittings.
 **Elastic Deformation
 ***Dimensions within ISO tolerance

Test Load		Permissible Criteria	
		Deflection under Load	Residual Deformation
1.	Stacking		
	952 KN (97,200 KG) per post	Corner Posts ** 4MM	2MM
		Bottom Side	4MM
	Offset: 25MM laterally	Rails	
	38MM longitudinally	Cross Members *6MM	3MM
	(1.8R-T) loaded on floor		
2.A	Lifting from the four top corner fittings		
	(2R), vertically	Bottom Side	4MM
	(2R-T), loaded on floor	Rails	
		Cross Members *6MM	3MM
2.B	Lifting from the four bottom corner fittings		
	(2R), lifting forces 30 angle	Bottom Side	4MM
	(2R-T), Loaded on floor	Rails	
		Cross Members *6MM	3MM
3.	Restraint		
	(2R),	Bottom Side Rails	
	R per rail, compression and tension longitudinally,	Vertically	4MM
	(R-T) loaded on floor	Longitudinally	2MM

4.	Strength of End Walls			
	(0.4P) uniformly	Front End Panel Door Panel		8MM 5MM
5.	Strength of Side Walls			
	(0.6P) uniformly	Side Panel Top & Bottom Side Rails		10MM 4MM
6.	Floor Strength			
	7,260 KG, axle weight 3,630 KG per wheel	Cross Members		3MM
7.	Strength of the Roof			
	300 KG, distributed over an area of 300MM x 600MM	Roof Panel		5MM
8.A	Rigidity (Transverse)			
	15,240 KG, horizontally, push and pull	End Frame (diagonal)	** 60MM	10MM
8.B	Rigidity (Longitudinal)			
	7,620 KG, horizontally, push and pull	Side Frame (at Top Fittings)	** 25MM	7MM
9.	Weatherproofness			
	By Spray Rack System: Nozzle Pressure: Nozzle Diameter:	0.5 hour min. 1 KG / CM ² 12.5 MM		
	Distance from Container Surface to Nozzle: Remove Speed:	1.5 M 100 MM/SEC.		
10.	One Door Off Test:			
	Stacking test :	27,450kg/post		
	Racking test:	7,500kg		
	End wall test :	5,650kg		



SECTION "C"-"C"

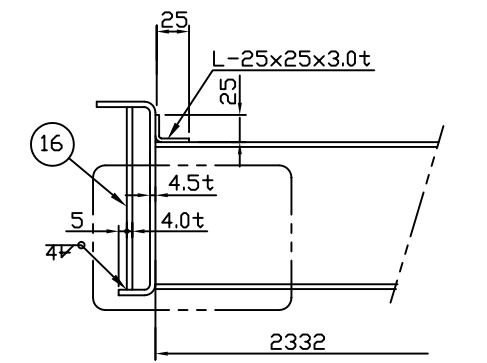
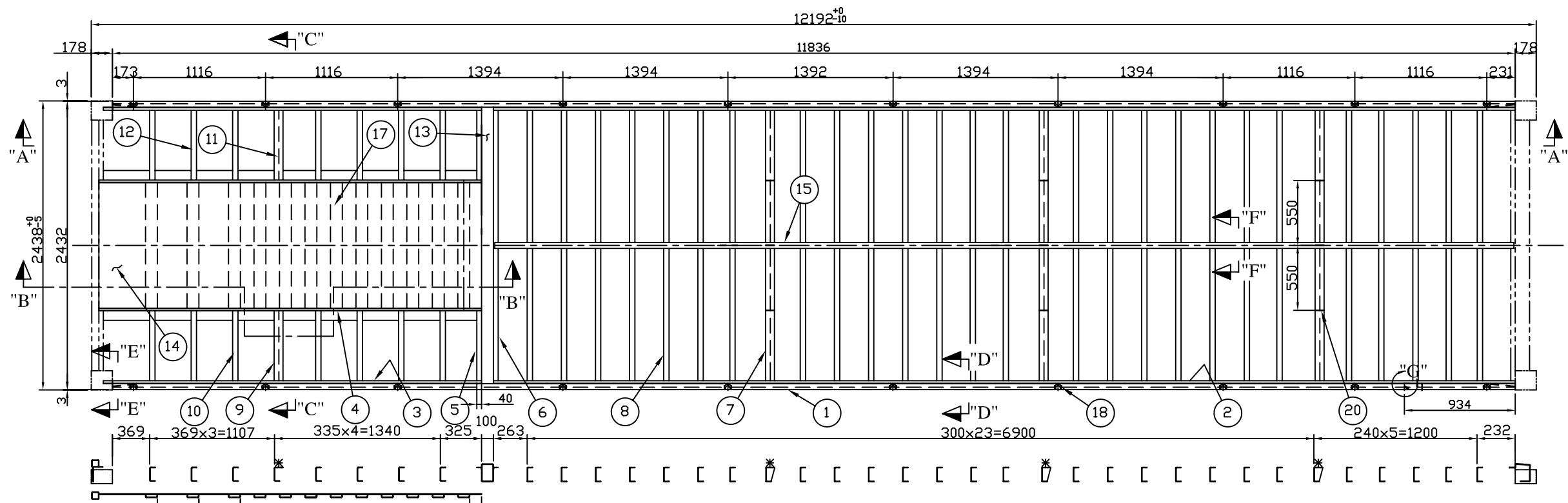


PRINCIPAL PARTICULAR			
MAX. GROSS WEIGHT		30480 KG	67200 LBS
TARE WEIGHT		3800 KG	8380 LBS
MAX. CARGO WEIGHT		26680 KG	58820 LBS
CUBIC CAPACITY		67.8 M ³	2394 FT ³
STACKING CAPACITY/POST		97200 KG	214300 LBS
RACKING TEST LOAD		15240 KG	33600 LBS
FLOOR TEST LOAD		7260 KG	16000 LBS
EXTERNAL	HEIGHT	8'-6"	2591 MM
	WIDTH	8'	2438 MM
	LENGTH	40'	12192 MM
INTERNAL	HEIGHT	7'-10 7/32"	2393 MM
	WIDTH	7'-8 19/32"	2352 MM
	LENGTH	39'-5 21/32"	12032 MM
DOOR OPENING	HEIGHT	7'-5 49/64"	2280 MM
	WIDTH	7'-8 1/8"	2340 MM

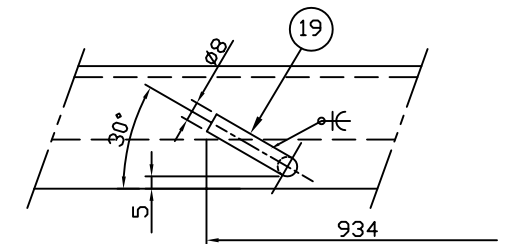
10	APPLICATION OF SEALANT	CARF-1001	1
9	CONSOLIDATED PLATED	CAR-F-9001	1
8	ARRANGEMENT OF MARKING	CAR-F-9000	1
7	FLOOR ASSEMBLY	CAR-FQ-8000	1
6	DOOR ASSEMBLY	CAR-TF-7000	1
5	ROOF ASSEMBLY	CAR-FQ-6000	1
4	SIDE ASSEMBLY	CAR-F-5000	1
3	REAR ASSEMBLY	CAR-F-4000	1
2	FRONT ASSEMBLY	CAR-F-3000	1
1	BASE ASSEMBLY	CAR-FQ-2000	1
ITEM	DESCRIPTION	DWG. NO.	QTY

SINGAMAS

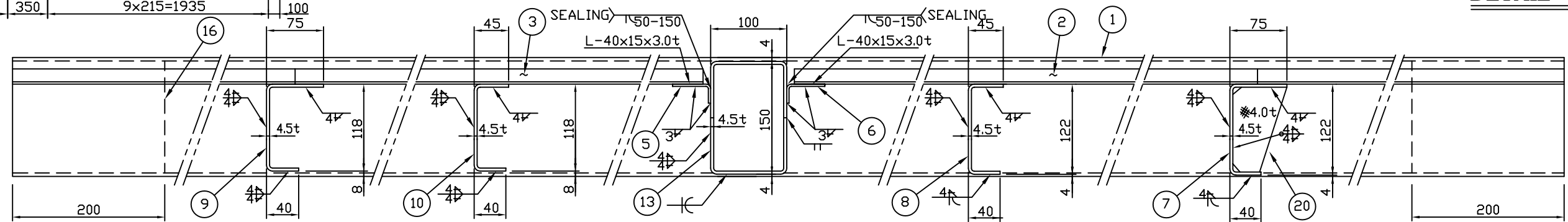
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	GENERAL ASSEMBLY
SCALE :	DATE :	OWNER : CARU	DWG. NO : CAR-F-1000	
	20051230	MODEL :		



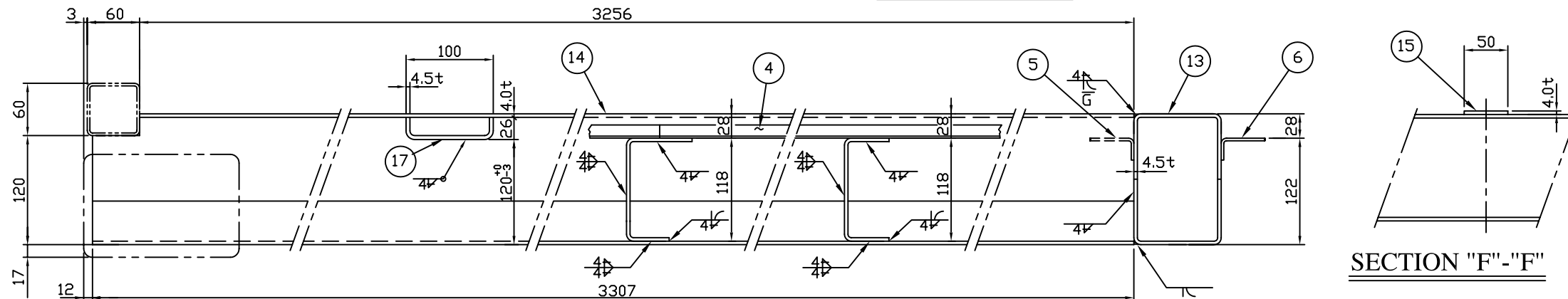
SECTION "E"-"E"



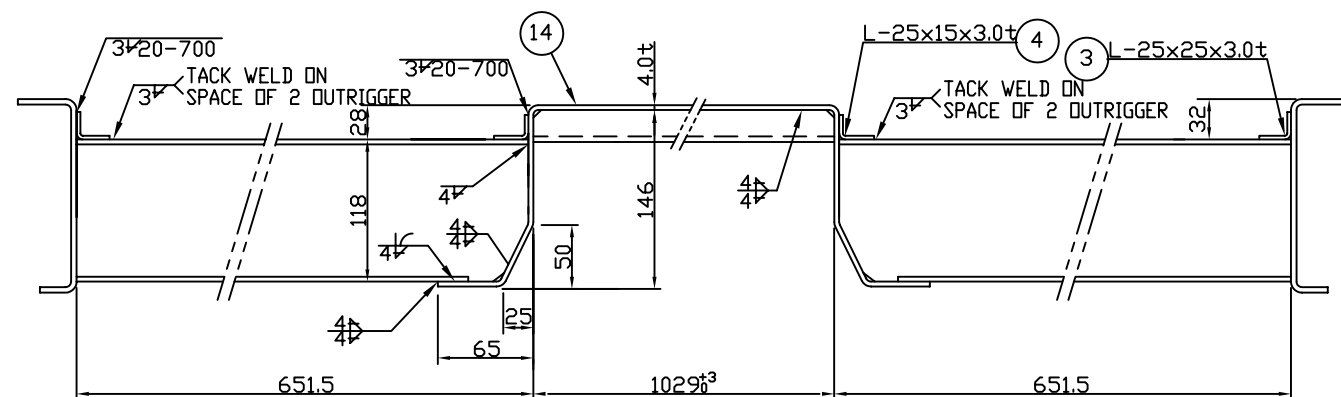
DETAIL "G"



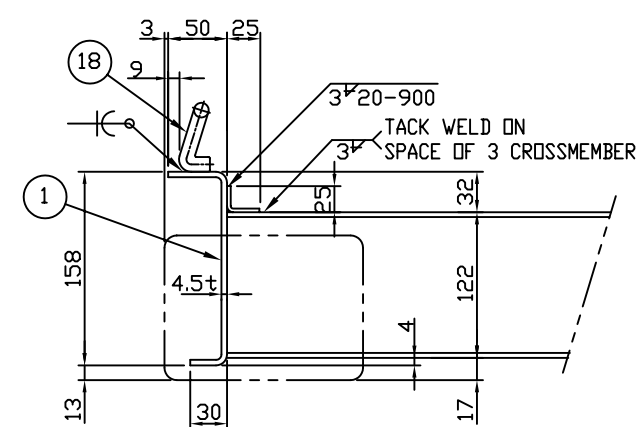
SECTION "A"-"A"



SECTION "B"-"B"



SECTION "C"-"C"



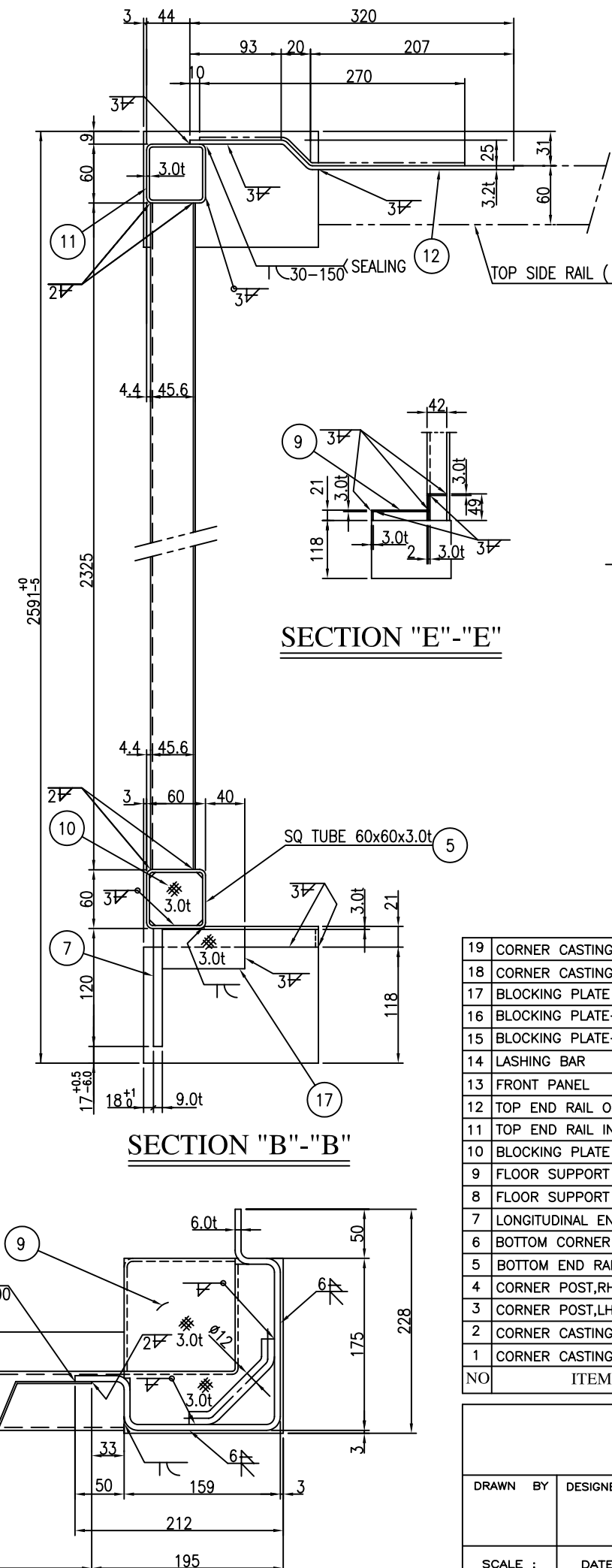
SECTION "D"-"D"

SECTION "F"-"F"

20	STIFFENER	T-2011	SPA-H	9	4.0t
19	HOOK DOOR HOLDER	T-2007	SS41	2	Ø8 (E.Z.P.)
18	LASHING RING	T-2008	SS41	20	Ø12 (E.Z.P.)
17	GOOSENECK STIFFENER	F-2017	SPA-H	12	4.5t
16	BASE GUSSET	T-2006	SPA-H	4	4.0t
15	FLOOR SPACER	F-2015	SPA-H	1 SET	4.0t(H.D.G)
14	GOOSENECK TUNNEL	F-2014	SPA-H	1	4.0t
13	BOLSTER	CARF-2013	SPA-H	1	4.5t
12	OUTRIGGER SMALL,RH	CARF-2012	SPA-H	7	4.5t
11	OUTRIGGER LARGE,RH	CARF-2011	SPA-H	1	4.5t
10	OUTRIGGER SMALL,LH	CARF-2010	SPA-H	7	4.5t
9	OUTRIGGER LARGE,LH	CARF-2009	SPA-H	1	4.5t
8	CROSS MEMBER SMALL	CART-2002	SPA-H	26	4.5t
7	CROSS MEMBER LARGE	CART-2003	SPA-H	3	4.5t
6	FLOOR RETAINER "E"	F-2006	SPA-H	1	3.0t
5	FLOOR RETAINER "D"	F-2005	SPA-H	2	3.0t
4	FLOOR RETAINER "C"	CARF-2004	SPA-H	2 SETS	3.0t
3	FLOOR RETAINER "B"	CARF-2003	SPA-H	2 SETS	3.0t
2	FLOOR RETAINER "A"	CARF-2002	SPA-H	2 SETS	3.0t
1	BOTTOM SIDE RAIL	F-2001	SPA-H	2	4.5t
NO	ITEM		MT'L	QTY	REMARKS

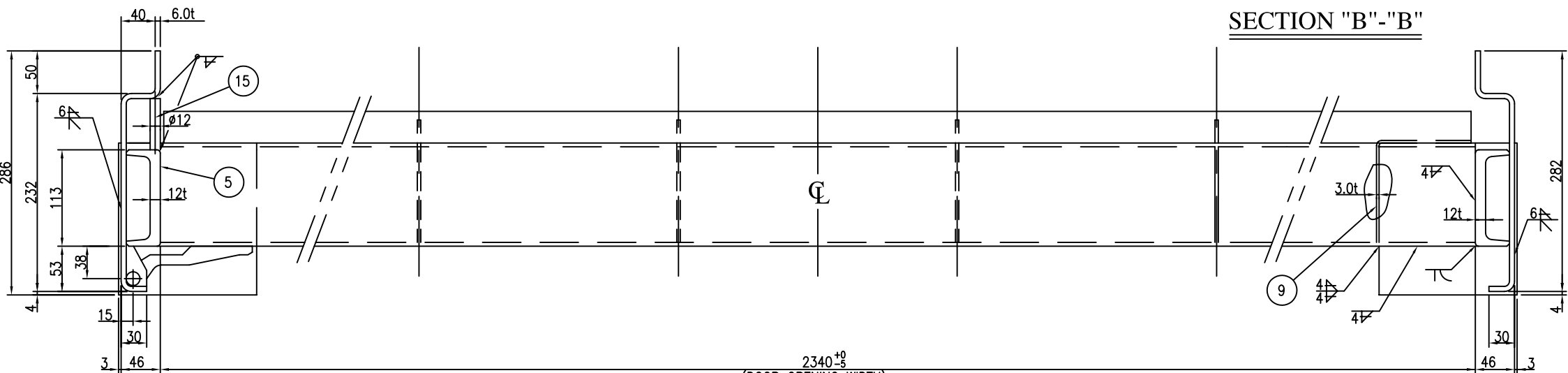
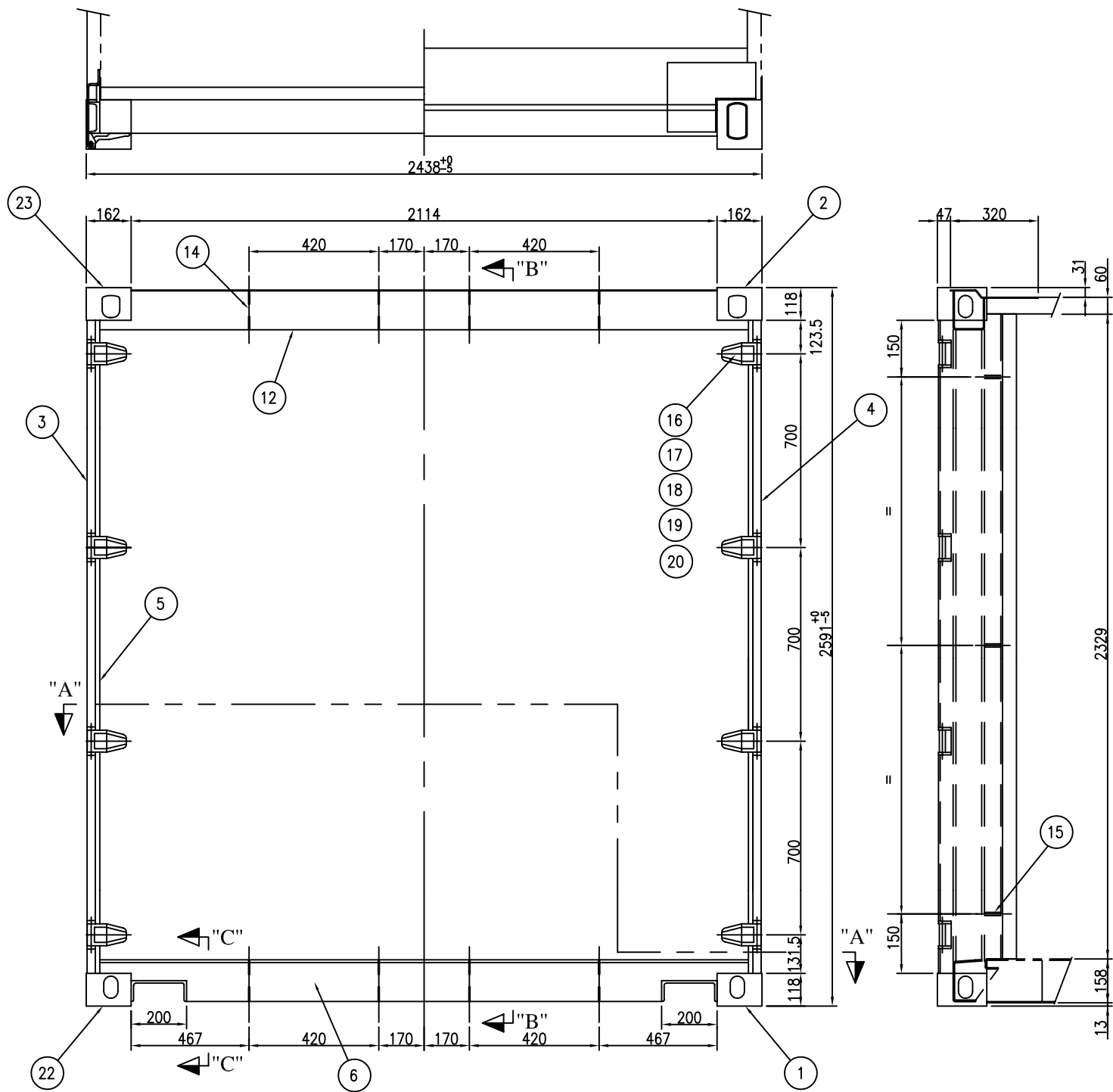
SINGAMAS

DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	BASE ASSEMBLY
SCALE :	DATE : 20051230	OWNER : CARU MODEL :	DWG. NO :CAR-FQ-2000	

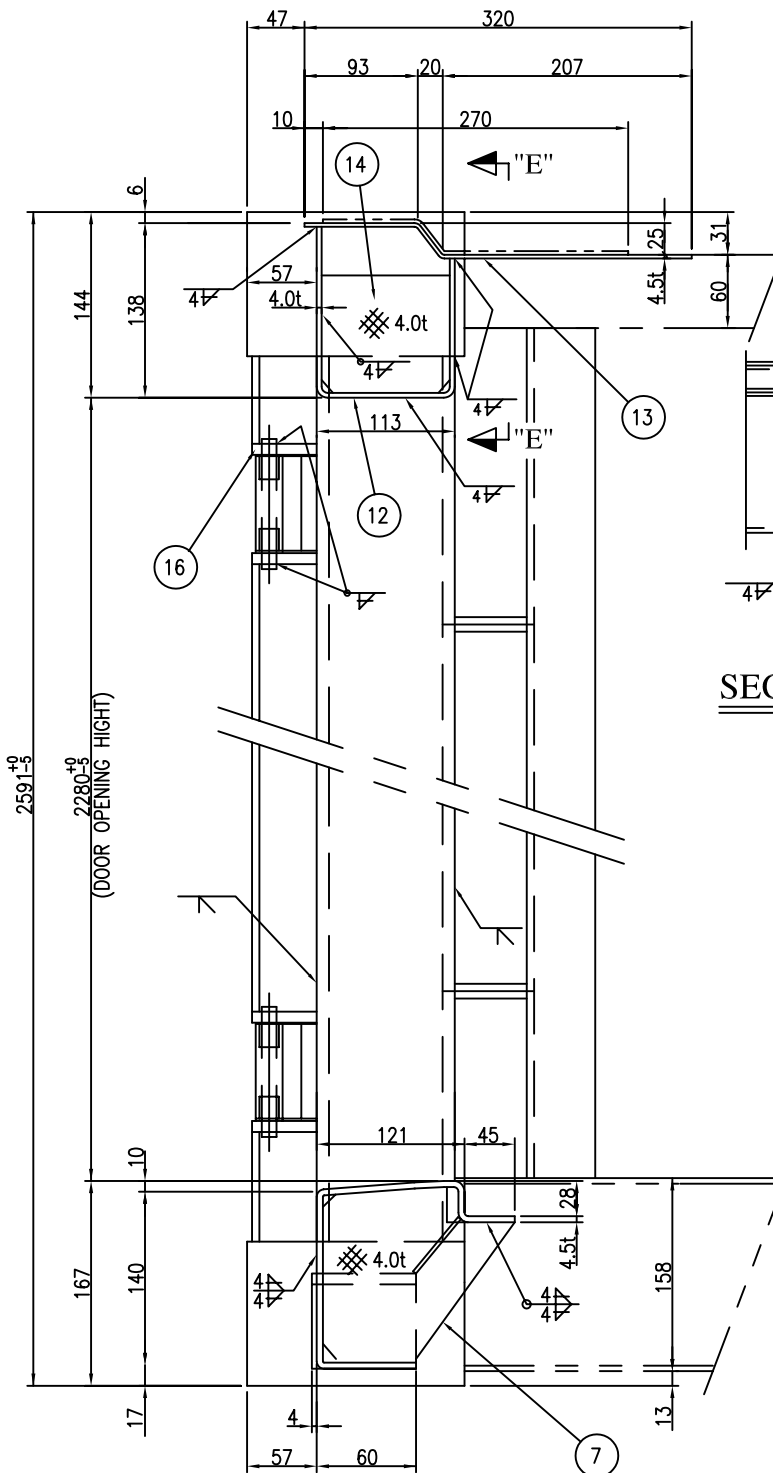


19	CORNER CASTING TFR	NO DRAWING SUBJECT TO: ISO 1161	SCW49	1	
18	CORNER CASTING BFR		SCW49	1	
17	BLOCKING PLATE	F-3017	SPA-H	2	3.0t
16	BLOCKING PLATE-CORNER POST	T-3017	SPA-H	2	6.0t
15	BLOCKING PLATE-CORNER POST	T-3016	SPA-H	2	6.0t
14	LASHING BAR	T-3015	SS41	6	ZINC PLATED
13	FRONT PANEL	F-3014	SPA-H	2	2.0t
12	TOP END RAIL OUTER	CARF-3012	SPA-H	1	3.2t
11	TOP END RAIL INNER	T-3012	SPA-H	1	60x60x3.0t
10	BLOCKING PLATE	F-3010	SPA-H	2	3.0t
9	FLOOR SUPPORT ASS'Y	T-3008A,B,C,D	SPA-H	2	LH & RH
8	FLOOR SUPPORT STRIP	CARF-3008	SPA-H	2	4.0t
7	LONGITUDINAL END PROTECTOR	F-3007	SS41	2	9.0t
6	BOTTOM CORNER PROTECTOR	F-3006	SS41	2	9.0t
5	BOTTOM END RAIL	T-3012	SPA-H	1	60x60x3.0t
4	CORNER POST,RH	F-3003	SPA-H	1	6.0t
3	CORNER POST,LH	F-3004	SPA-H	1	6.0t
2	CORNER CASTING TFL	NO DRAWING SUBJECT TO: ISO 1161	SCW49	1	
1	CORNER CASTING BFL		SCW49	1	
NO	ITEM	DWG.NO.	MT'L	QTY	REMARKS

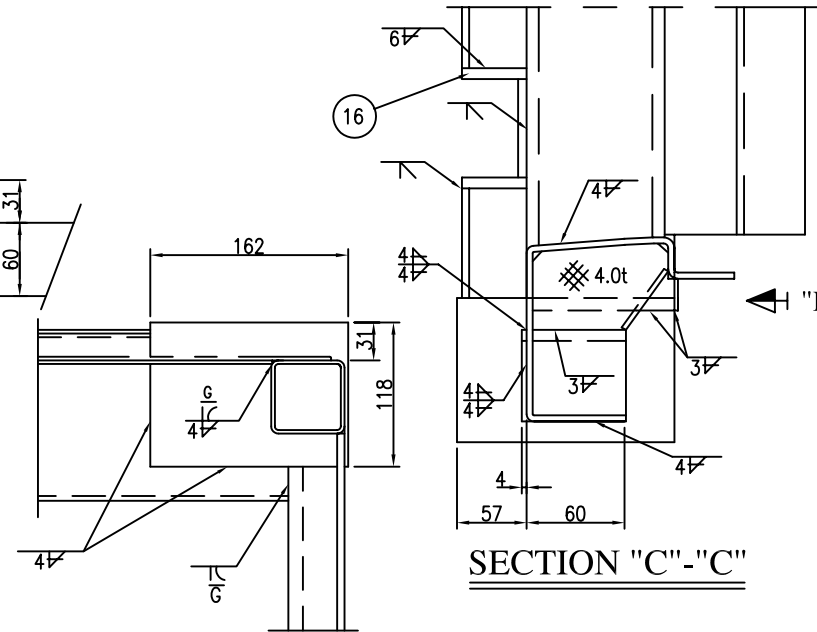
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DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	FRONT ASSEMBLY
SCALE :	DATE :	OWNER : CARU		
	20051215	MODEL :		DWG. NO : CAR-F-3000



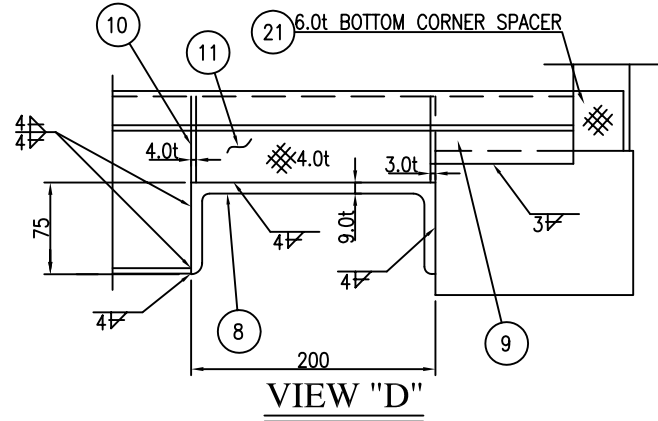
2340⁺⁰₋₃
(DOOR OPENING WIDTH)
SECTION "A" - "A"



SECTION "B" - "B"



SECTION "E" - "E"

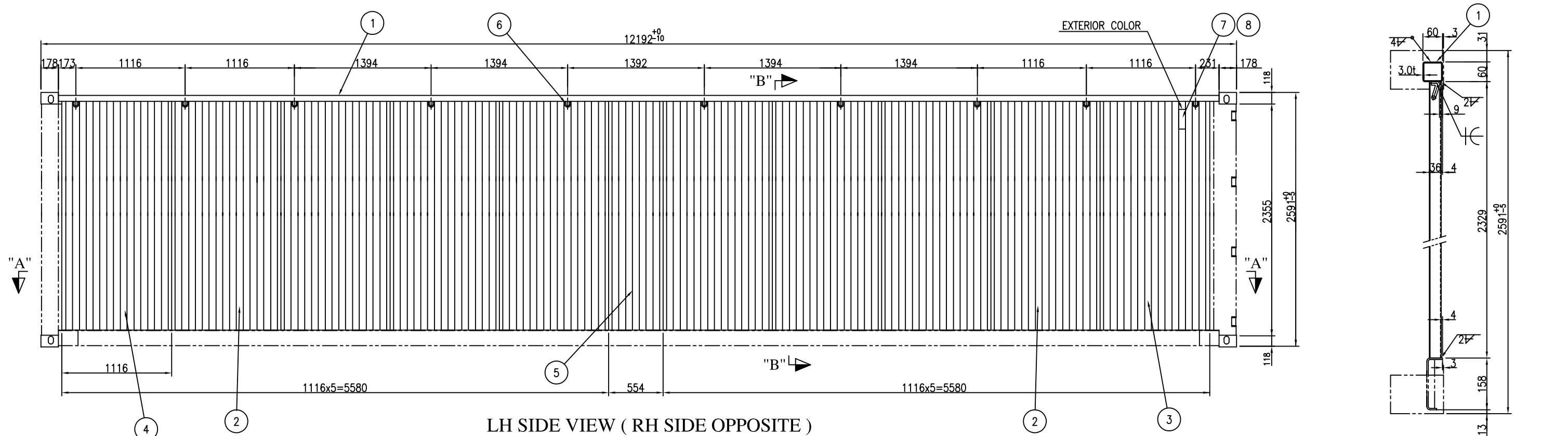


VIEW "D"

23	CORNER CASTING TRL	NO DRAWING	SCW49	1	
22	CORNER CASTING BRL	SUBJECT TO: ISO 1161	SCW49	1	
21	BOTTOM CORNER SPACER	T-4021	SPA-H	2	6.0t
20	HINGE BLADE	HF-005 OR EQUIVALENT	S25C	8	ZINC-PLATED
19	HINGE WASHER	CHBW-003 OR EQUIVALENT	SUS304	8	
18	HINGE PIN	CHPN-001-5 OR EQUIVALENT	SUS304	8	
17	HINGE BUSH	CHBS-007 OR EQUIVALENT	NYLON	16	
16	HINGE LUG	L-2210 OR EQUIVALENT	SS41	16	ZINC-PLATED
15	LASHING BAR	T-4015	SS41	6	ZINC-PLATED
14	DOOR HEADER STIFFENER	T-4014	SPA-H	4	4.0t
13	DOOR HEADER UPPER	CARF-3012	SPA-H	1	4.5t
12	DOOR HEADER LOWER	T-4012	SPA-H	1	4.0t
11	BLOCKING PLATE	T-4011	SPA-H	2	4.0t
10	BLOCKING PLATE	T-4010	SPA-H	2	4.0t
9	BLOCKING PLATE	T-4009	SPA-H	2	3.0t
8	CONE DAMAGE PROTECTOR	T-4008	SS41	2	200x75x9.0t
7	DOOR SILL STIFFENER	T-4007	SPA-H	4	4.0t
6	DOOR SILL	T-4006	SPA-H	1	4.5t
5	CORNER POST INNER	T-4005	SM50YA	2	113x40x12t
4	CORNER POST OUTER,RH	CART-4004	SPA-H	1	6.0t
3	CORNER POST OUTER,LH	CART-4003	SPA-H	1	6.0t
2	CORNER CASTING TRR	NO DRAWING	SCW49	1	
1	CORNER CASTING BRR	SUBJECT TO: ISO 1161	SCW49	1	
NO	ITEM	MTL	MTL	QTY	REMARKS

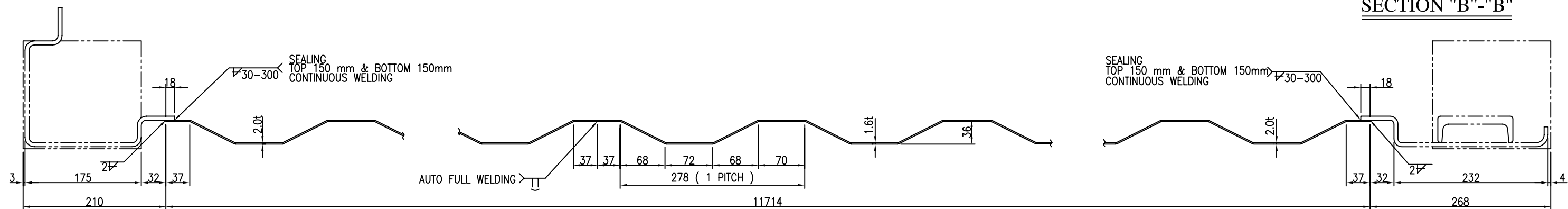
SINGAMAS

DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	REAR ASSEMBLY
SCALE :	DATE : 20051215	OWNER : CARU MODEL :	DWG. NO : CAR-F-4000	

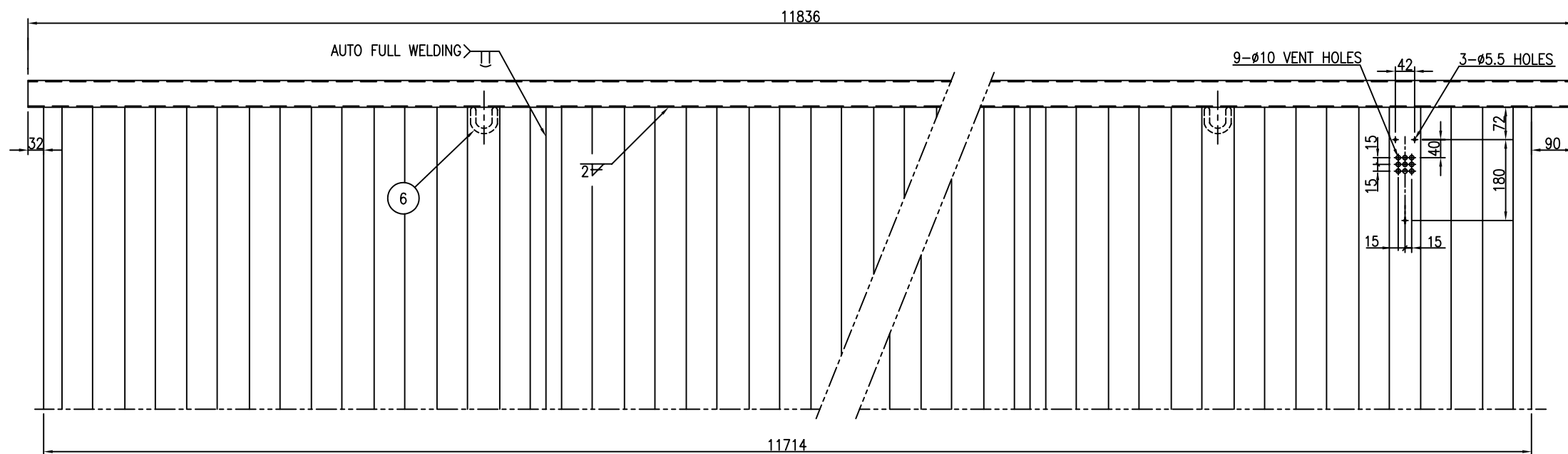


LH SIDE VIEW (RH SIDE OPPOSITE)

SECTION "B"-"B"



SECTION "A"-"A"

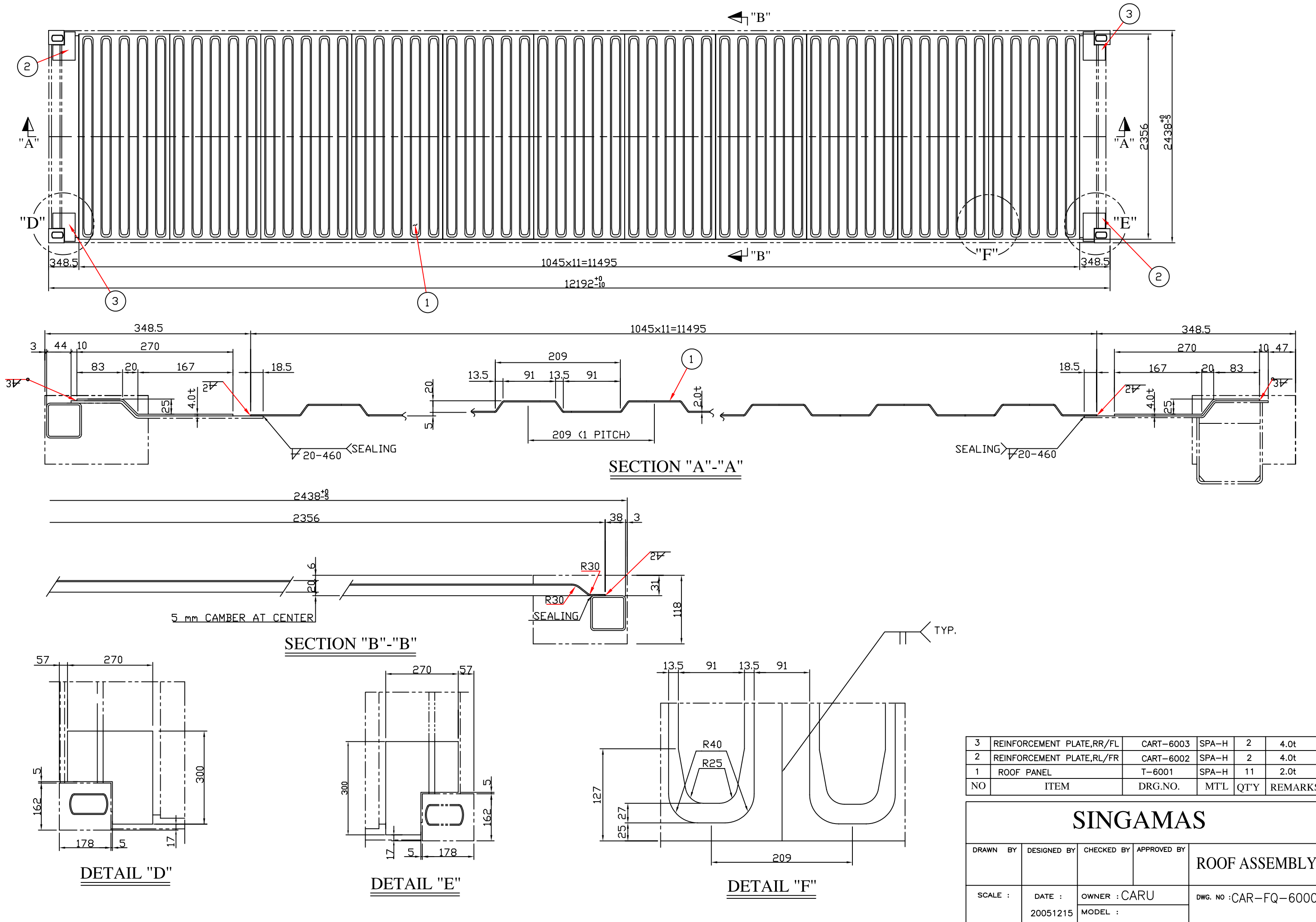


DETAIL OF VENT HOLES

8	HUCK BOLT	NO DRAWING	ALUM	3x2	Ø5.0
7	VENT COVER	NO DRAWING	A.B.S	1x2	SMALL
6	LASHING RING	T-2008	SS41	10x2	Ø12 (E.Z.P.)
5	INTERMEDIATE PANEL	F-5004	SPA-H	1x2	1.6t
4	END PANEL	CARF-5004	SPA-H	1x2	2.0t
3	END PANEL (VENTILATOR)	CARF-5003	SPA-H	1x2	2.0t
2	MAIN PANEL	T-5002	SPA-H	8x2	1.6t
1	TOP SIDE RAIL	F-5001	SPA-H	1x2	60x60x3.0t
NO	ITEM	DRG.NO.	MT'L	QTY	REMARKS

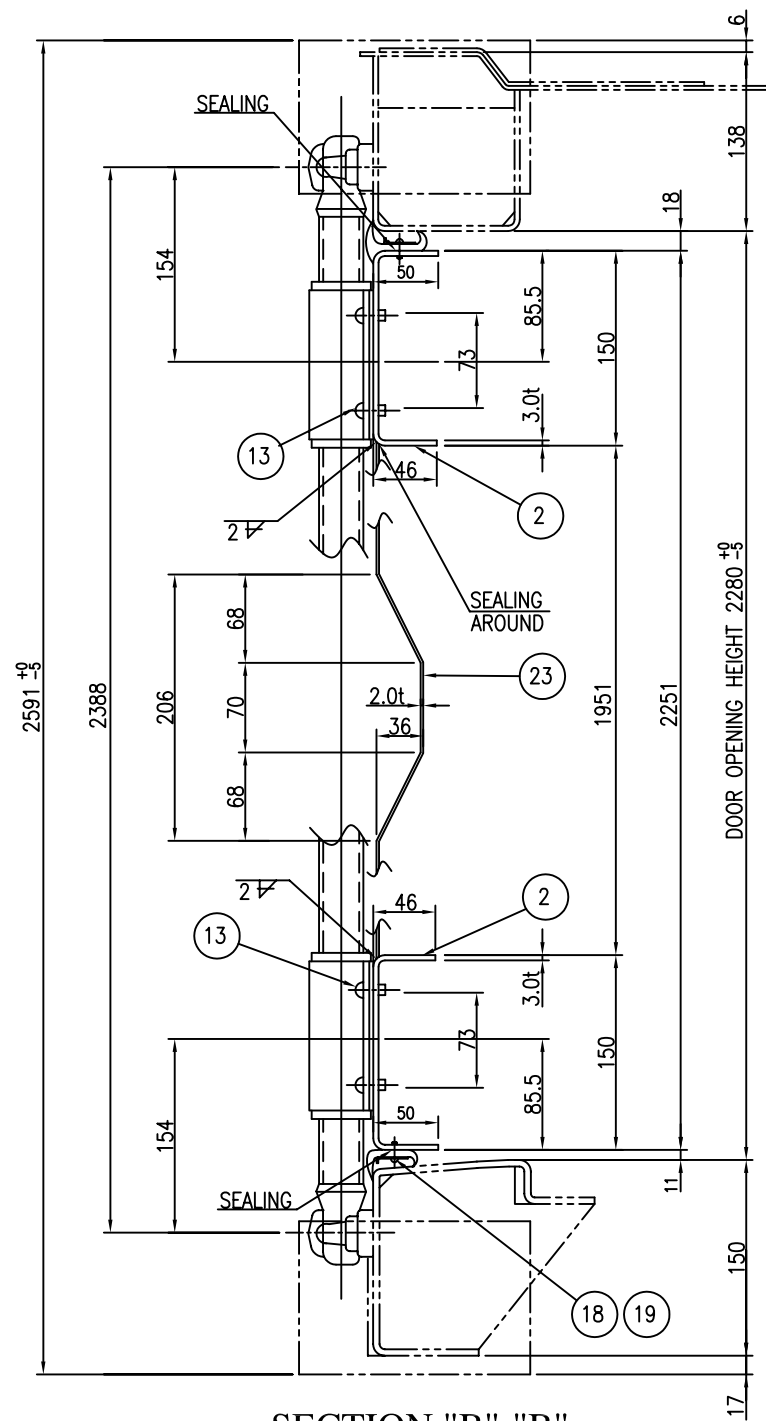
SINGAMAS

DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	SIDE ASSEMBLY
SCALE :	DATE :	OWNER : CARU	DWG. NO : CAR-F-5000	
	20051215	MODEL :		



3	REINFORCEMENT PLATE,RR/FL	CART-6003	SPA-H	2	4.0t
2	REINFORCEMENT PLATE,RL/FR	CART-6002	SPA-H	2	4.0t
1	ROOF PANEL	T-6001	SPA-H	11	2.0t
NO	ITEM	DRG.NO.	MTL	QTY	REMARKS

SINGAMAS					
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	ROOF ASSEMBLY	
SCALE :	DATE :	OWNER : CARU		DWG. NO : CAR-FQ-6000	
	20051215	MODEL :			



SECTION "B"-"B"

17

113

53

38

4

100

SEALING

SQ.TUBE 100x50x3.2t

SEALING

1

3.0t

2

3

SEALING

LOCKING ROD $\varnothing 34 \times 3.2t$

5

181

420

1143

943

SEALING

7

10

100

SEALING

1

3.0t

2

3

SEALING

SQ.TUBE 100x50x3.2t

SEALING

3.0t

4

4

15

138

340

18

1143

420

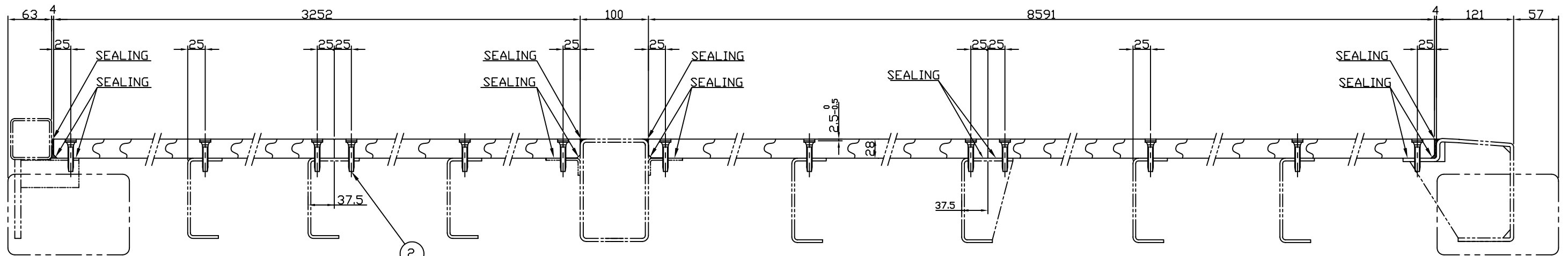
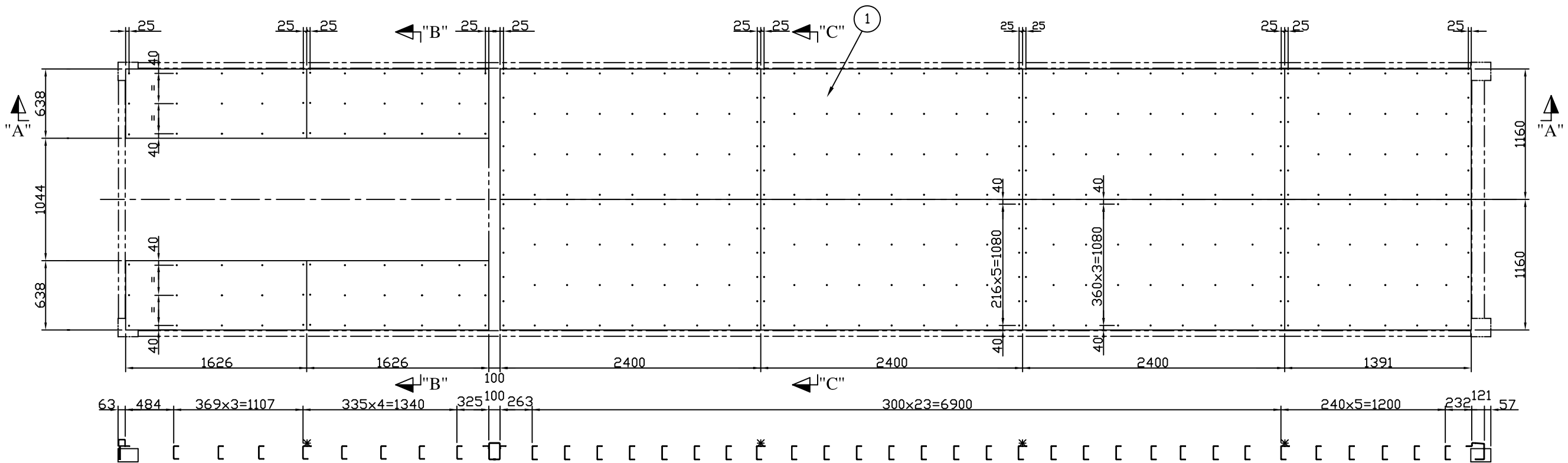
DOOR OPENING WIDTH 2340^{+0}_{-5}

SECTION "A"-"A"

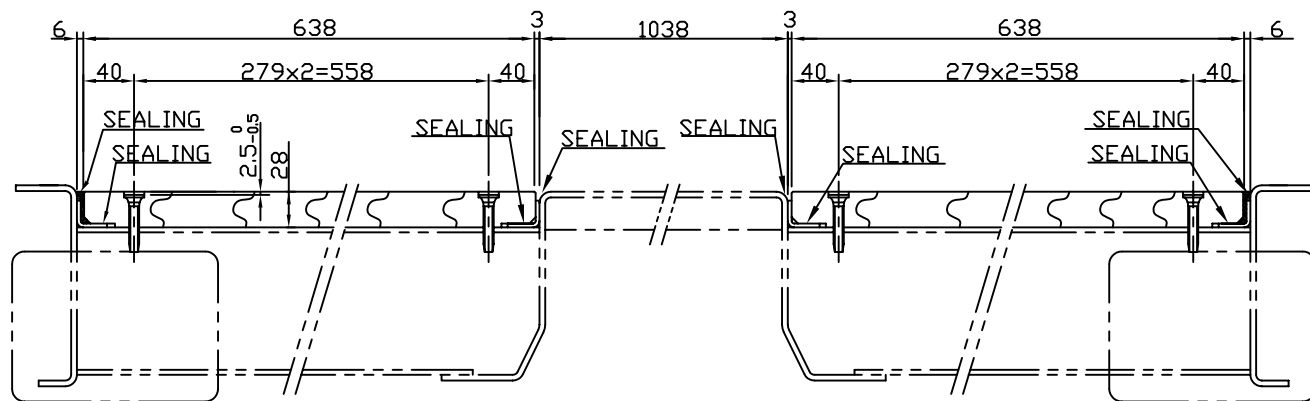
23	DOOR PANEL	CART-7023A,B	SPA-H	2	2.0t
22	DOOR HOLDER	NO DRAWING	NYLON	2	DOUBLE KNOT
21					
20					
19	BLIND RIVET	NO DRAWING	SUS 304	77	ø4.8 x 16.6
18	GASKET RETAINER ASS'Y	CART-7018	SUS 304	1 SET	1.0t (25mm width)
17	DOOR GASKET ASS'Y	NO DRAWING	E.P.D.M	1 SET	
16					
15					
14	HUCK BOLT	NO DRAWING	C6LB-R12-10G	4	GALV.
13	HUCK BOLT	”	C6LB-R12-6G	44	GALV.
12	PACKING-BRACKET SMALL	”	E.P.D.M	4	3.5t
11	PACKING-BRACKET LARGE	”	E.P.D.M	8	1.0t
10	PACKING- HANDLE RETAINER	NO DRAWING	E.P.D.M	4	3.5t
9	BRACKET SMALL ASS'Y	ACCORDING TO: THE LOCKING DEVICES	—	4	GALVANIZED
8	BRACKET LARGE ASS'Y		—	8	GALVANIZED
7	HANDLE RETAINER ASS'Y		—	4	GALVANIZED
6	LOCKING DEVICE ASS'Y,RH	T-7006	—	2	GALVANIZED
5	LOCKING DEVICE ASS'Y,LH	T-7005	—	2	GALVANIZED
4	TIR BRACKET	CART-7004	SPA-H	1	6.0t
3	D.E.M BLOCKING PLATE (BOTTOM PLATE WITH HOLE)	CART-7003A,B	SPA-H	4+4	3.0t
2	DOOR RAIL	CART-7002A,B	SPA-H	4	3.0t
1	DOOR EDGE MEMBER	T-7001	SPA-H	4	100x50x3.2t
NO	ITEM	DWG.NO.	MT'L	Q'TY	REMARKS

SINGAMAS

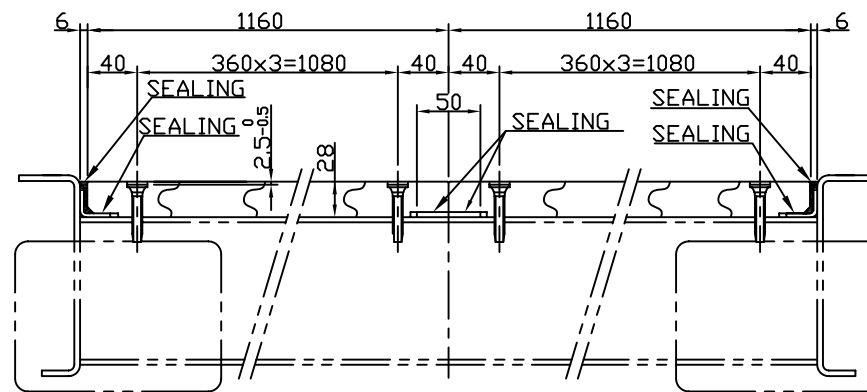
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	DOOR ASSEMBLY 20' & 40'
SCALE :	DATE : 20051230	OWNER : CARU MODEL :		
				DWG. NO : CAR-TF-7000



SECTION "A"-"A"



SECTION "B"-"B"



SECTION "C"-"C"

NOTE :

1. TIMBER TREATMENT IS IN ACCORDANCE WITH AUSTRALIAN DEPARTMENT OF HEALTH REGULATION
2. FLOOR ASS'Y MUST BE WATER TIGHT
3. SEALANT : (1) HIDDEN PARTS : BUTYL TYPE
(2) EXPOSED PARTS : CHLOROPRENE TYPE
4. All of the top surface of self tapping screws will be coated with varnish.

2	SELF TAPPING SCREW	NO. DRAWING	ELECTRO-ZINC PLATED STEEL	370	M8x45
1	FLOOR PLYWOOD	F-8001	APITONG OR KERUING	1	28t
NO	ITEM	DWG.NO.	MT'L	QTY	REMARKS

SINGAMAS

DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	FLOOR ASSEMBLY	
SCALE :	DATE : 20051230	OWNER : CARU	MODEL :	DWG. NO : CAR-FQ-8000	