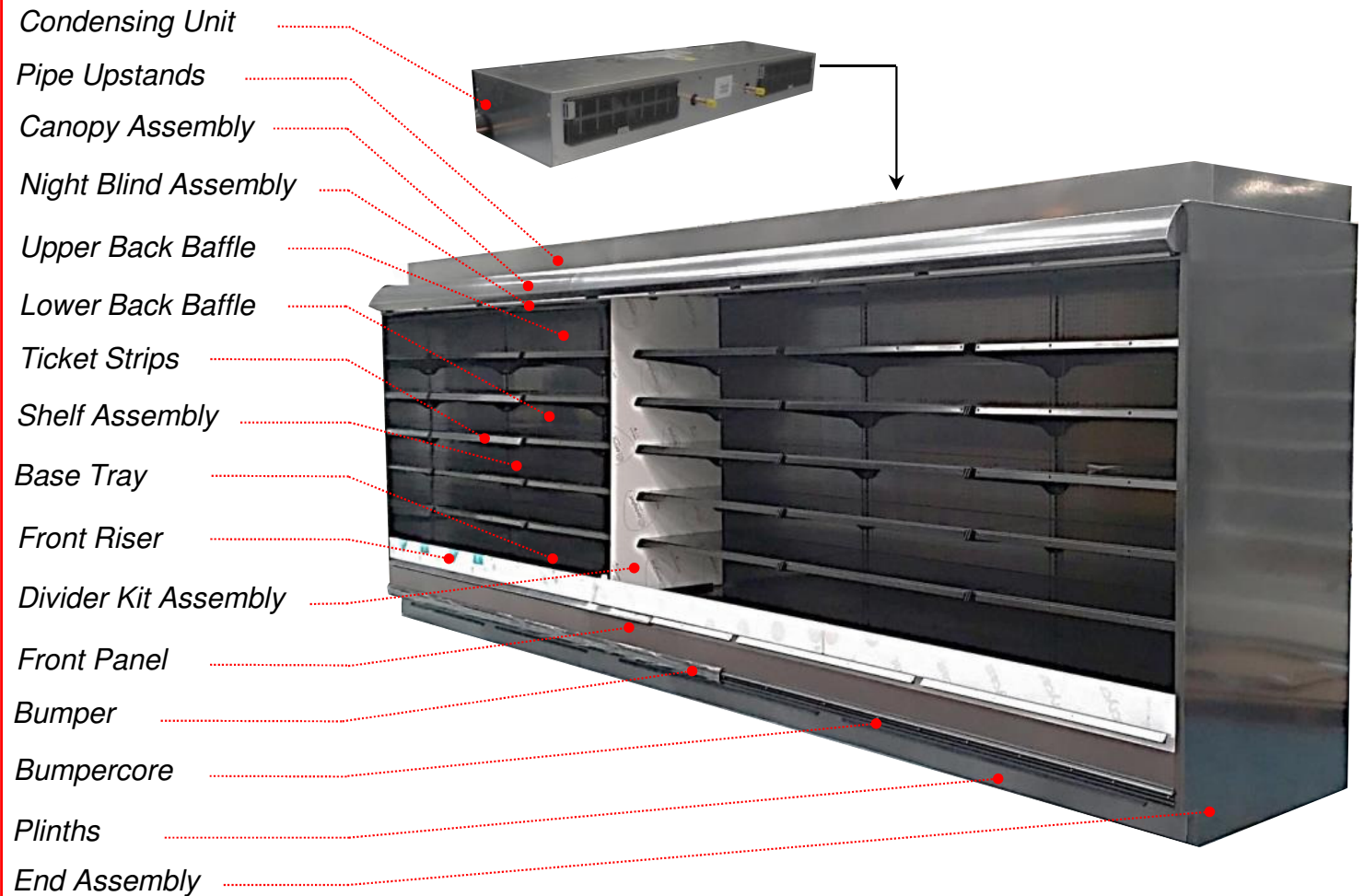


# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A

## Contents Sheet

1. Cabinet transport method / techniques
2. Fit cabinet end gaskets
3. Cabinet levelling
4. Cabinet to cabinet fixing
5. End assembly fitting
6. Ceiling honeycomb alignment
7. Divider kit assembly
8. Night blind adjustment
9. Bumper assembly
10. Canopy assembly
11. Pipe upstand assembly
12. Control panel connections
13. Drainage assembly
14. Plinth assembly
15. Shelf sub assembly
16. Ticket strip assembly
17. Condenser transport brackets



# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A

## Scope of work:

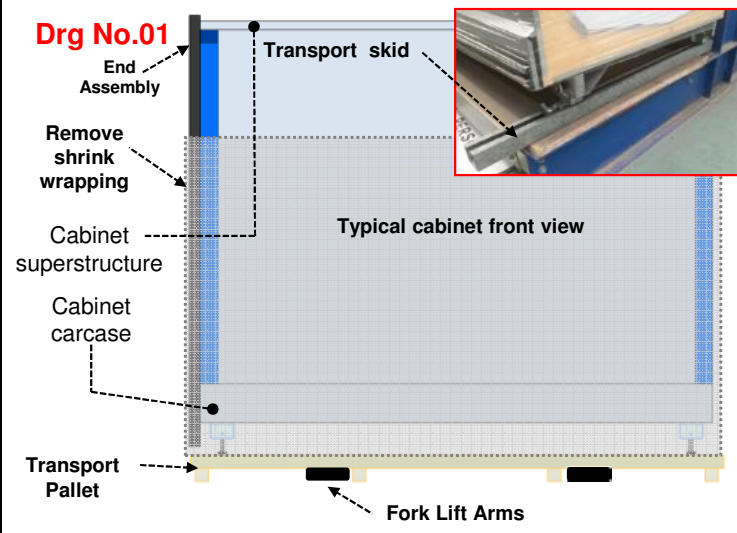
This document will go through the basic generic stages to install and multiplex cabinets. Follow the installation procedure below in the following stages:

### 1. Cabinet Transport Method / Techniques

Depending on how the cabinet is presented, either fixed to the pallet base or fitted with skids - see drawing number 01, lift cabinet of the transport vehicle using correct lifting equipment. If lifting cabinet fitted with pallet, position lifting fork evenly on the underside of the pallet. If lifting the cabinet fitted with skids, please ensure the lifting forks DO NOT damage the control unit gear tray mounting brackets and the 'P' trap drain when positioned on the underside of the carcass assembly. See drawing number 02.

With the cabinet taken off the transport vehicle. For SKIDS lower the fork height approximately 1.3m from ground level and remove the skids from the cabinet foot assembly. For PALLET lower the cabinet to ground level and disconnect the pallet assembly from cabinet foot assembly.

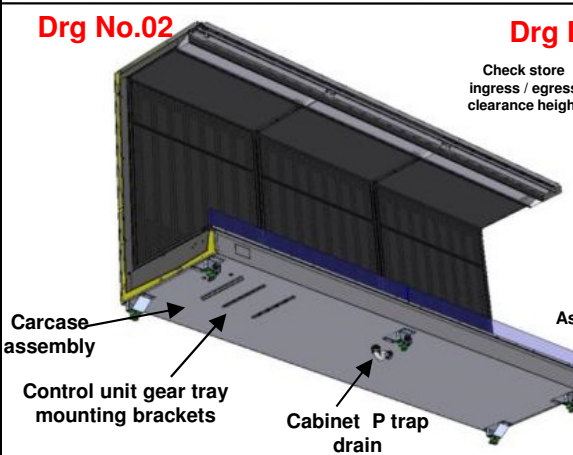
Then lower cabinet onto transport dolly's or leg dolly's positioned at each corner or end of the cabinet see drawing number 03. Check store ingress clearance height. Transport cabinet/s to installation location. Using a pallet truck lift cabinet up to remove the dolly's. Remove the cabinet shrink wrap using a safety knife, so preventing the panels from getting scratched.



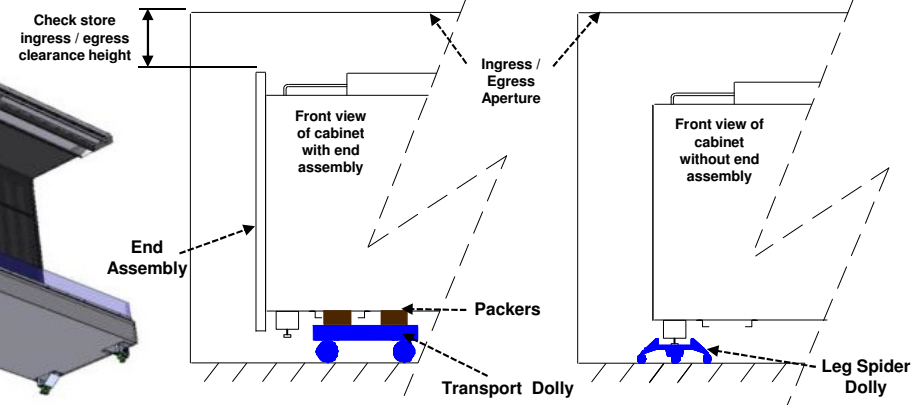
**DO NOT** use open end blades to remove shrink wrapping.



Used safety knife to remove shrink wrapping



**Drg No.03** Typical cabinet front showing transport into / out off the store



# Standard Operating Procedure No 535

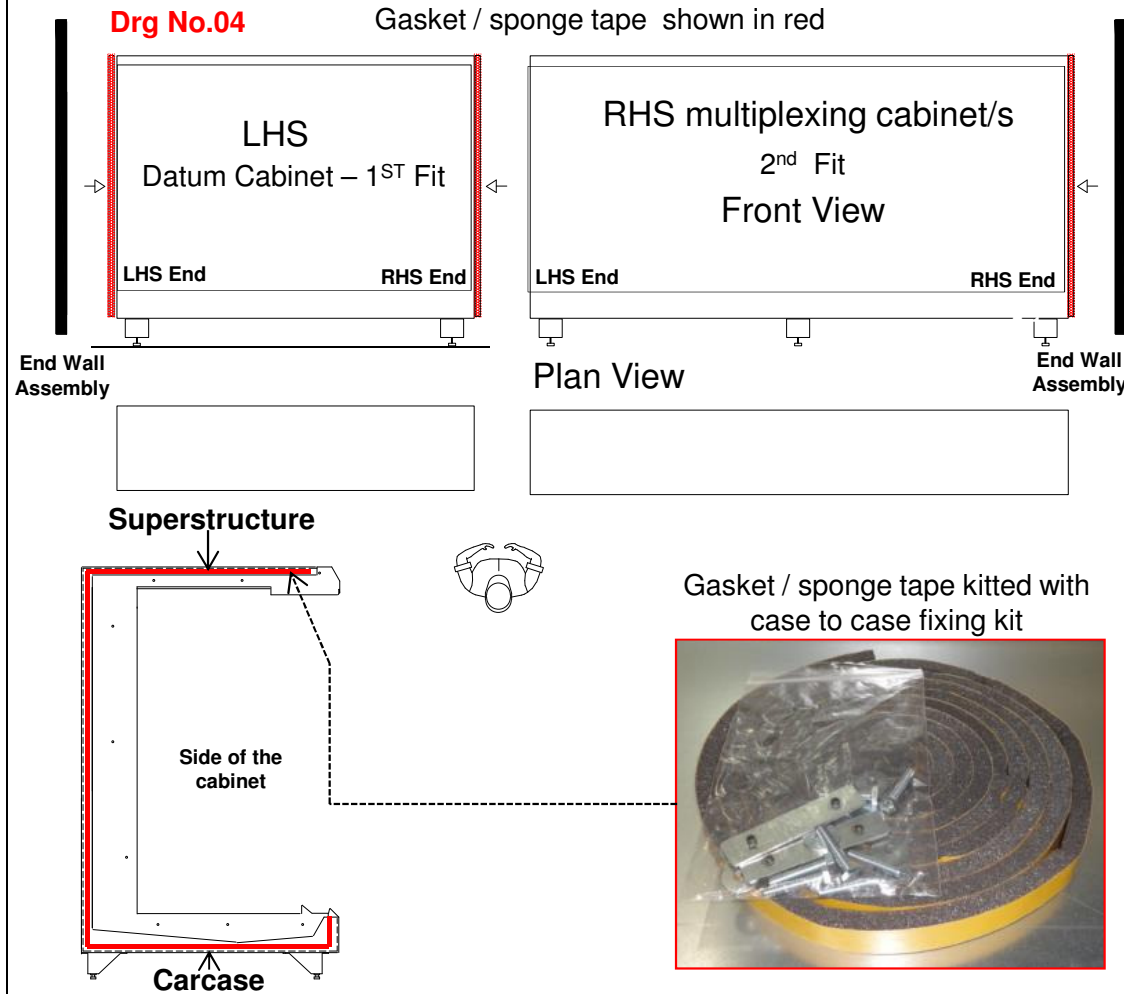
Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:  Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

## 2. Fit cabinet end gaskets (sponge tape)

Temporary remove and store all loose parts located inside the cabinet to a location where parts can be stored free from damage.

From the case to case fixing kit supplied, fit the gasket (sponge tape) to the perimeter of the cabinet profile (cabinet super structure & carcass) - see drawing number 04.

Note: datum cabinet will have gaskets fitted on both LHS & RHS cabinet ends. All remaining cabinets to be multiplex against the datum cabinet, fit gasket to the RHS end of the cabinet only.



# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A

### 3. Cabinet levelling

Position the first - datum cabinet to the required installation position. Datum cabinet is the LHS cabinet configuration of the multiplex run. See drawing number 05.

With the LHS datum cabinet in position, set front foot assembly height to either 135 or 140mm. Measure the drainage pipework supplied to determine which height is required ( 135mm for 1 ¼ inch diameter drainage pipework & 1 ½ inch diameter drainage pipework). Please note the height measurement is taken from the underside of the carcass assembly and to the underside of and foot assembly. See drawing number 06 position 'A'.

Place a tubular spirit level to the vertical end frame section – see drawing number 06 position 'B' and set the rear foot assembly height until the bubble within the level is centred between the two lines drawn on the spirit level vial.

Place a tubular spirit level onto the front panel– see drawing number 06 position 'C' and set the front foot assembly height at position 'E1' until the bubble within the level is centred between the two lines drawn on the spirit level vial. Check foot height measurement. Its must not drop below 130mm for 1 ¼ drain pipework and 135mm for 1 ½ drain pipework.. Were possible try to maintain the set height at position 'A'. This is all dependable how level the ground floor is. See drawing number 08.

Place a tubular spirit level to the vertical end frame section – see drawing number 06 position 'D' and set the rear foot assembly height until the bubble within the level is centred between the two lines drawn on the spirit level vial. See drawing number 07

Start to multiplex the cabinets together . Position RHS cabinet against the datum cabinet.

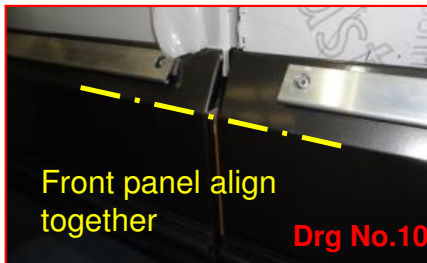
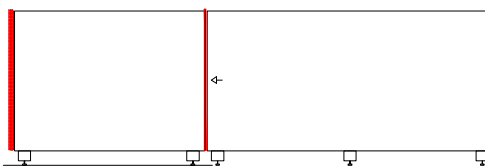
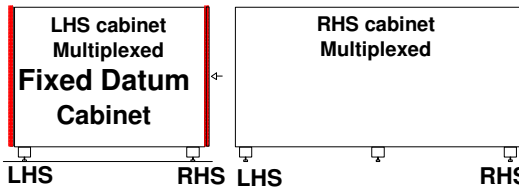
Set the front foot assembly height at position 'E2' , so the front panel from the RHS cabinet is aligned with the front panel on the LHS datum cabinet. See drawing number 06.

Place a tubular spirit level to the vertical end frame section – see drawing number 06 position 'F' and set the rear foot assembly height until the bubble within the level is centred between the two lines drawn on the spirit level vial and both the RHS end frame shelf bracket slots cut-outs from datum cabinet align with the slot cut –outs from LHS end frame from the RHS multiplex cabinet .

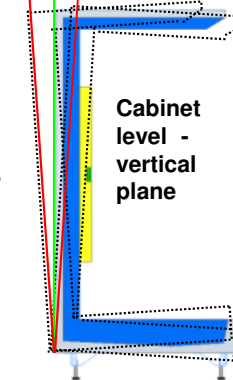
Place a tubular spirit level onto the front panel– see drawing number 06 position 'G' and set the front foot assembly height at position 'E3' until the bubble within the level is centred between the two lines drawn on the spirit level vial. Check foot height measurement. Its must not drop below 130mm for 1 ¼ drain pipework and 135mm for 1 ½ drain pipework

Set rear foot assembly at position 'H' to instructions above. Set mid front foot assembly height to ground level. Repeat processes above to multiplex cabinets .

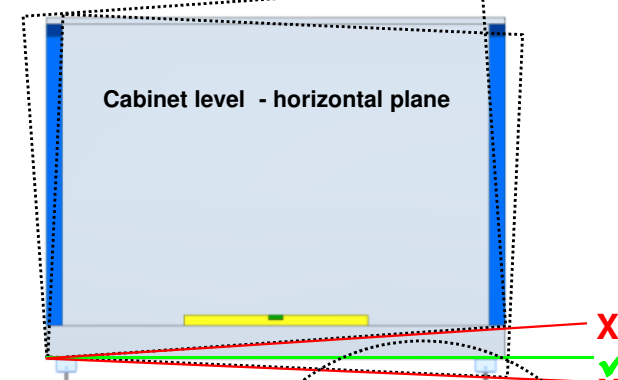
#### Drg No.05



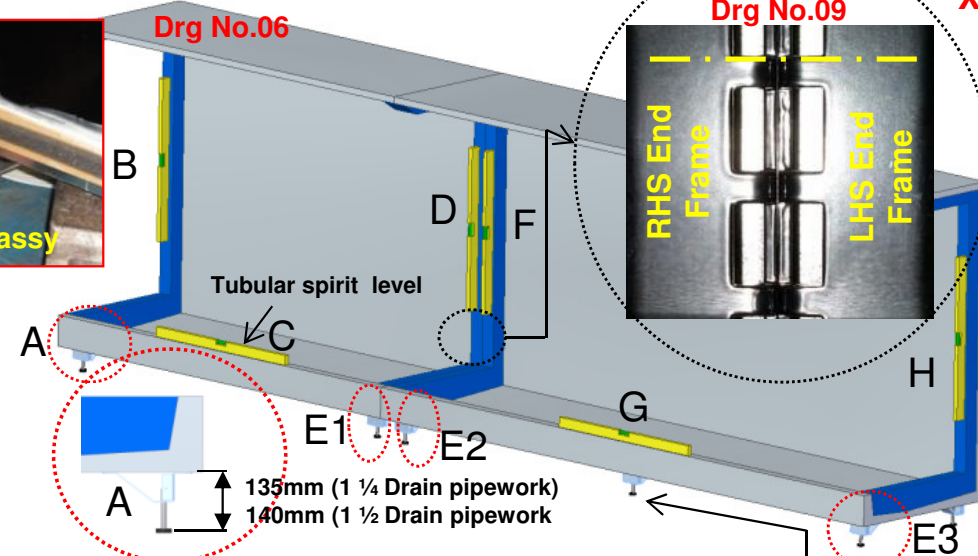
#### Drg No.07



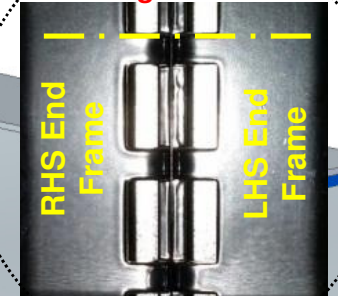
#### Drg No.08



#### Drg No.06



#### Drg No.09



10/03/2015

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Middle foot assembly is set to ground level after LHS & RHS foot assemblies have bee set at correct cabinet level

# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A

## 4. Cabinet to cabinet fixing

Once all the cabinets in the run have been multiplex, levelled and the middle foot assembly set to ground level. Now we can start to multiplex the cabinet together.

For each multiplexing cabinets remove pre fitted parts from the cabinet 1<sup>st</sup> LHS bay – remove shelf assemblies, base trays, upper and lower back baffles . Store parts in safe area - free from damage. Part s to be refitted at later stage. See drawing number 10.

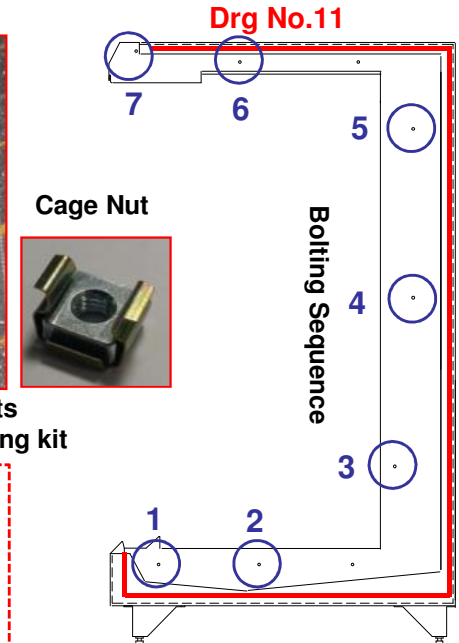
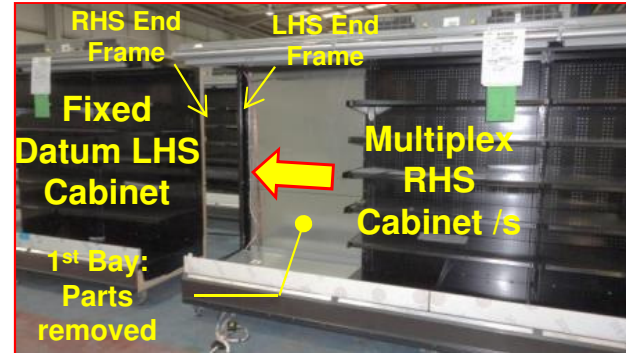
To start always bolt the LHS end frame from the joining multiplex cabinet to the RHS end frame of the datum cabinet OR previously multiplex cabinet . Fixing bolts are provided in the case to case fixing pack. See drawing number 10.

Also note that the LHS end frames do not require cage nuts to be fitted. If cage nuts are fitted please remove them before cabinet to cabinet fixing takes place. Only RHS end frames have cage nuts fitted.

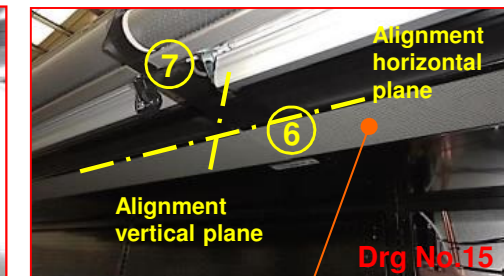
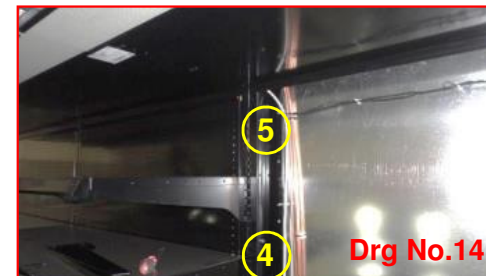
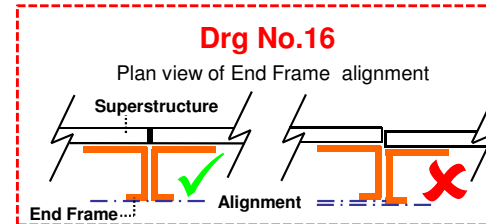
Bolting sequence 1 to 7 , see drawing number 11  
Check the mating end frame are fitted with cage nuts before starting.

Temporary relocate the fan baffle assembly . See drawing number 12. Start bolting sequence 1 and 2, checking the front panel alignment explained in the case levelling chapter . Bolting sequence 3,4 and 5 see drawing number 13, 14, 15 , ensure both LHS & RHS end frame front faces are align together flush, drawing 16 before bolting. Sequence 6 and 7 see drawing number 15 check the honeycomb rear support panels from both joining cabinets align in both horizontal and vertical planes . Temporary remove ceiling honey comb assembly to access the fixing in position 6.

### Drg No.10



Cabinet to cabinet fixing bolts enclosed inside case to case fixing kit



10/03/2015

Temporary relocate LHS fan baffle assembly to access bolting sequence '1'

Hard Copies Not Controlled - Ensure You Have Latest Issue

Temporary relocate the ceiling honeycomb to access bolting sequence '6'

# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A

## 5. End assembly

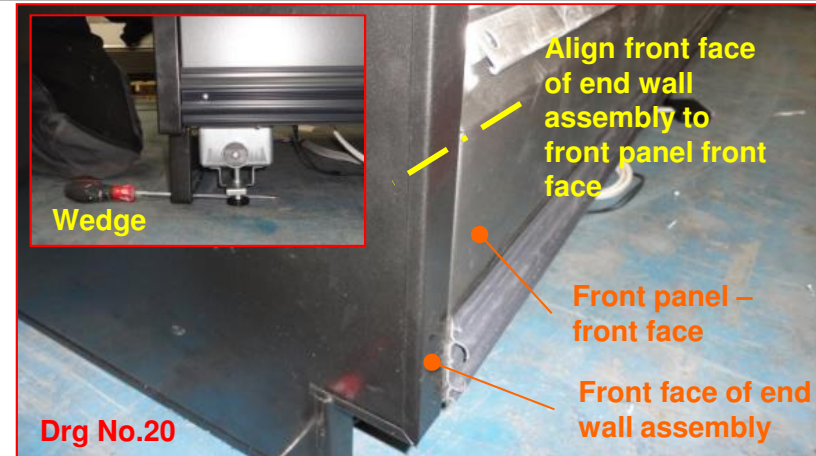
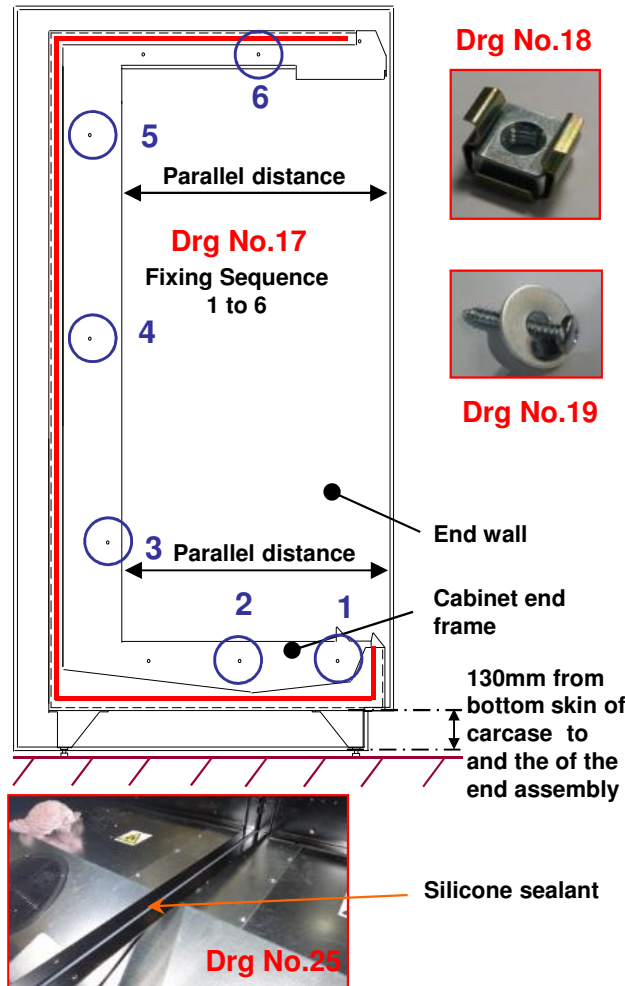
Before bolting on the end assemblies, remove cage nuts that have been pre fitted for cabinet multiplexing from each end frame that the end assembly is going to be fitted to. Drawing number 18 shows photo of cage nut/s to be removed. Drawing number 19 shows the fixing No 8 screw with mud guard washer to be used to secure the end wall assembly to the end frame. Note the screwing fixing length must not exceed the thickness of the end wall assembly thickness.

Measure and mark the internal face of the end wall assembly with a distance of 130mm from the bottom edge of the end wall assembly. See drawing number 17.

Position the internal face of the end assembly flush to the end frame and place wedges at the bottom of the end wall assembly. Drive the wedges back and forward to set the 130mm height – height from the bottom of carcass to the bottom of the end wall. See drawing number 20.

Align flush the front face of the end wall assembly with the front panel. See drawing number 20. Follow the fixing sequence 1 to 6 shown in drawing number 17 and secure the end wall assembly to the end frame. Note, always pilot drill (3.3mm diameter) the end wall before securing it with No. 8 screws and mud guard washers. Maintain equal parallel distance from the end wall front face and front face of the end frame. See photos 21, 22, 23, 24

Silicone seal the gap between end frame top edge and internal face of the end wall assembly. See photo number 25.



# Standard Operating Procedure No 535

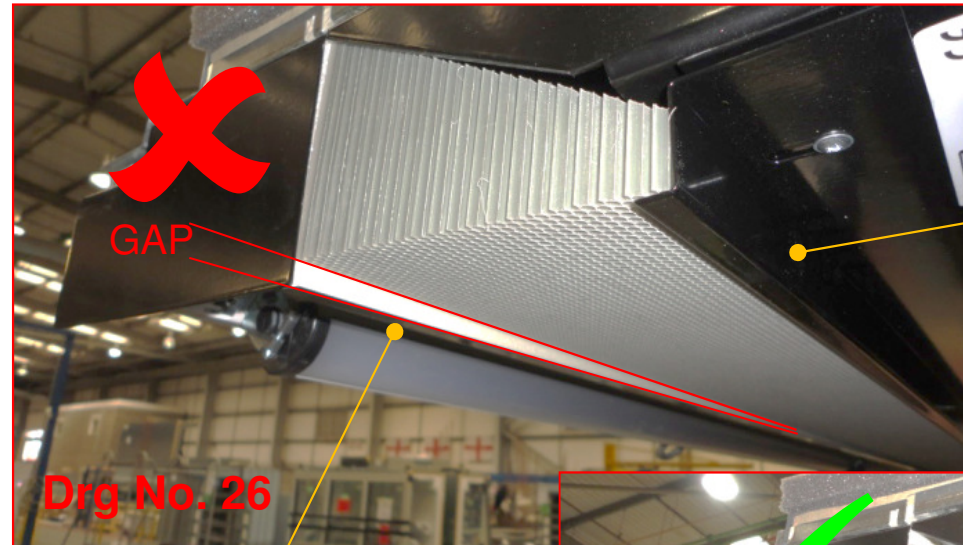
		Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

## 6. Ceiling Honeycomb alignment

Check each ceiling honeycomb is seated flush between the inner side and top faces of the rear and front honeycomb supports.

Drawing number 26 shows poor seating of the honeycomb. To correct loosen the fixings securing the honeycomb rear support and move support away from honeycomb. Using long nose pliers pull the honeycomb down. Align and secure honeycomb rear support.

Drawing number 27 shows the honeycomb seated correctly.



Drg No. 26

Honeycomb front support

Pliers



Drg No. 27

Honeycomb rear support

# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:  Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

**7. Divider kit assembly**

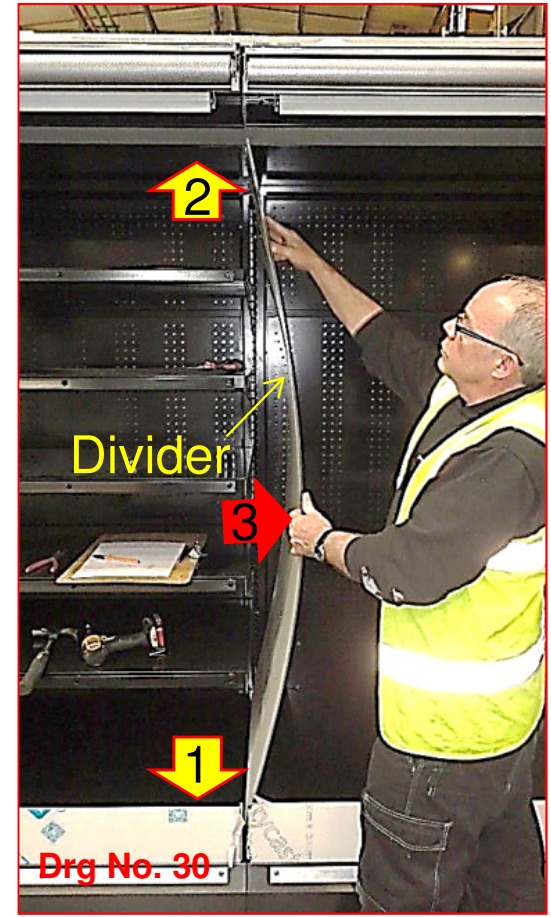
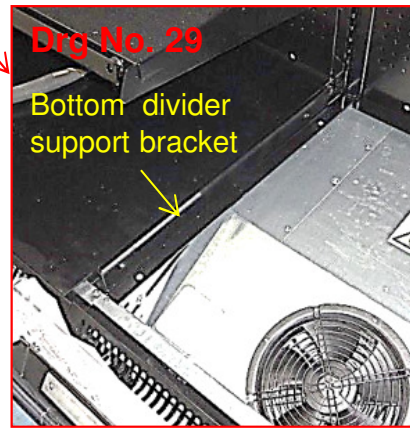
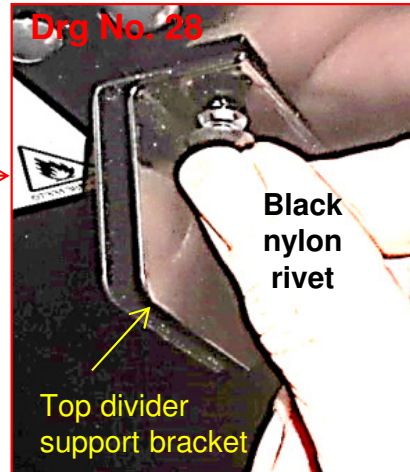
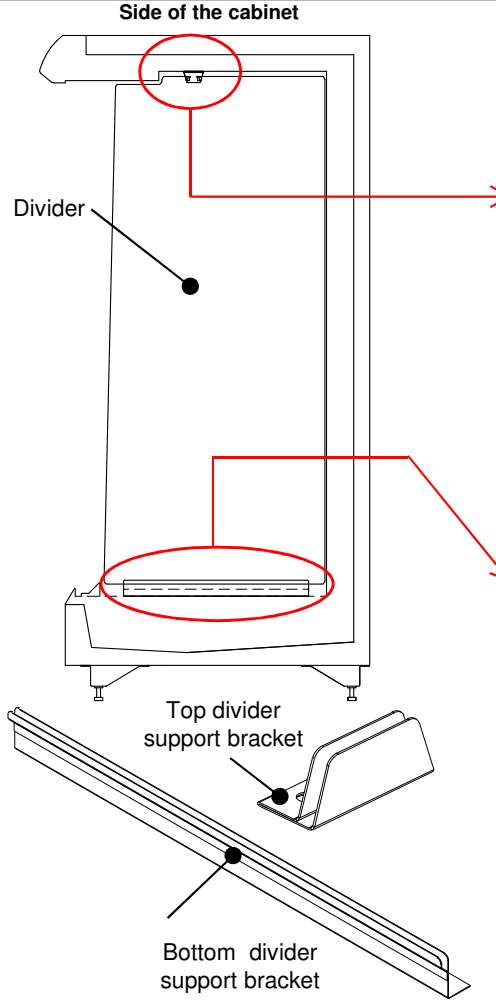
Divider kit assemblies are only fitted to LHS bays of each multiplex joining cabinets.

Fit the top divider support bracket to the ceiling panel 2 off hole and secure using black nylon rivets. See drawing number 28.

Fit the bottom divider support bracket to the end frame assembly 2 off holes and secure with black nylon rivets. See drawing number 29.

To get the divider to fit both the top and bottom divider brackets, fit the bottom section of the divider panel into the bottom divider bracket slot and then bend the divider panel outwards to fit the top section of the divider panel into the top divider bracket slot. See drawing number 30.

Finally remove the protective films on both sides of the divider panel.





# Standard Operating Procedure No 535

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Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A

## 8. Night blind adjustment

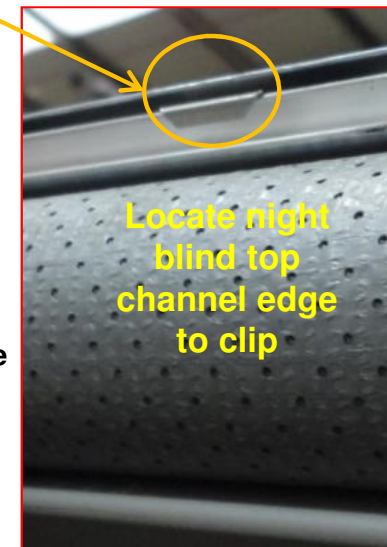
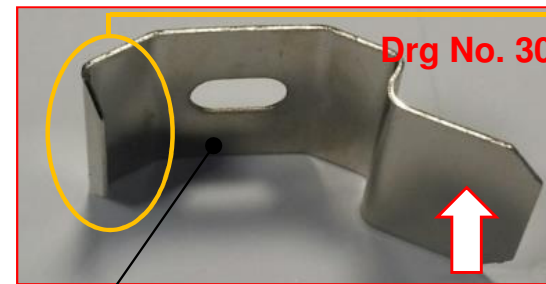
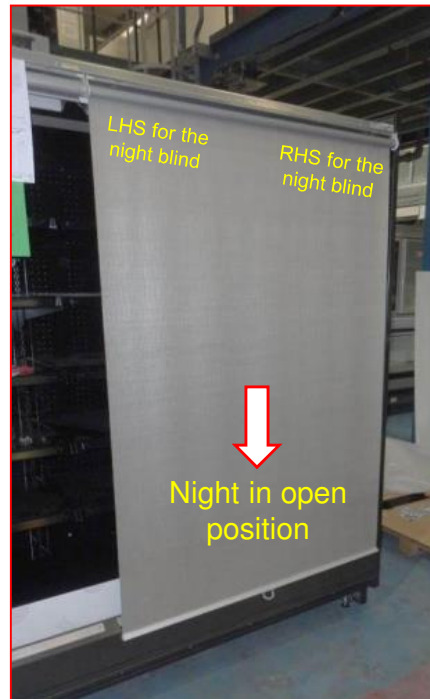
Please note night blinds fitted have been pre tensioned.

If for any reason the tensioning is low -night blind is not returning back to its closed position or the tensioning is too high – the night blind is returning back to its closed position at a high speed or at an inconsistent speed compared to its adjacent night blind. The carry out the following below –

Using a flat headed screw driver push the night blind securing clip on the RHS of the night assembly and unhook the night blind down, so allowing access to the night blind tensioning adjustment screw. See drawing numbers 30, 31, 32.

Turn the adjustment screw either clockwise (negative symbol) to reduce the tensioning and counter clockwise (positive symbol) to increase the tension. Note – do not over tension the night blind, this will result in fast blind return on closure, potentially causing the blind handle section hitting the light tubes fitted to the light carrier assembly.

Refitting the night blind , position the front edge of the night blind top channel against the securing clip and the using a flat headed screw driver and push the lever section of the securing clip upwards to allow the night blind top channel rear to snap into the clip assembly



Night blind securing clip

Push lever arm upwards to release & lock night blind assembly to clip

# Standard Operating Procedure No 535

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Men:  Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

## 9. Bumper assembly

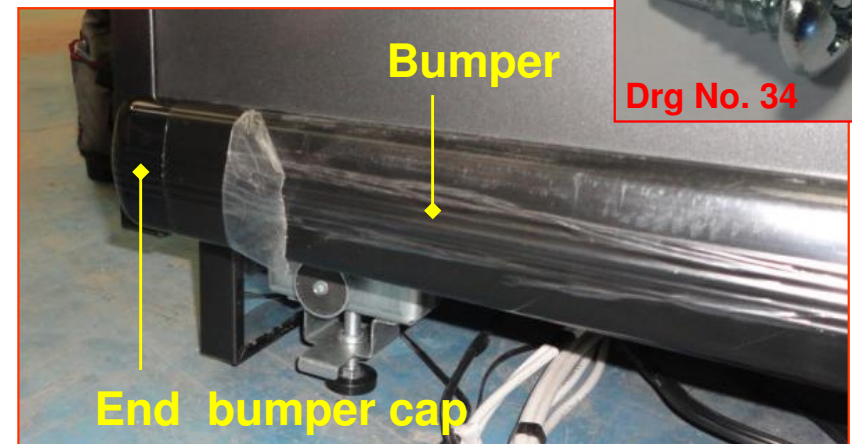
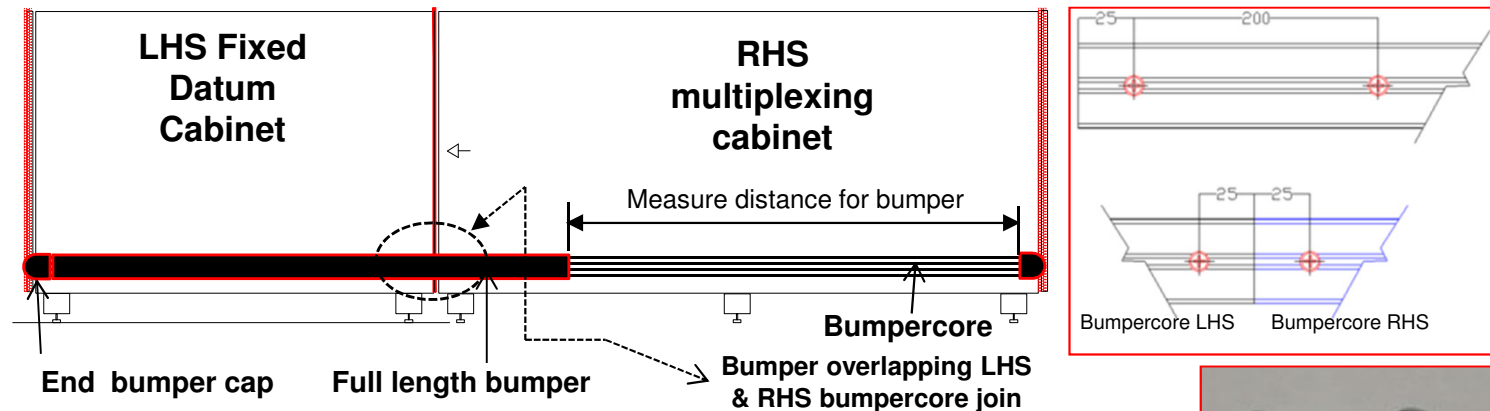
Please note for cabinet transport, some fixing screws have been removed from the bumpercore assembly. Refit missing screws at 200mm pitch before fitting the bumper.

Fit bumper end caps to both ends of the bumpercore. See drawing number 33. Align the bumper end cap flush with the outer skin of the end wall assembly and secure with fixing. See drawing number 34.

Fit the bumper, start from the LHS of the cabinet. Fit the full length bumper flush to the LHS bumper end cap. See drawing. Note the bumper length will overlap the joining of two cabinets.

Then measure and cut to size the remaining bumpercore distance not fitted with bumper. Fit the bumper flush to end of the existing fitted bumper and RHS end cap.

### Drg No. 33



# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A

## 10. Canopy assembly

Please note: Canopies are configured to match cabinet length sizes 3.75m , 2.50m, 1.87 m etc. , when fitting the canopies ensure the correct length canopy corresponds to the cabinet length.

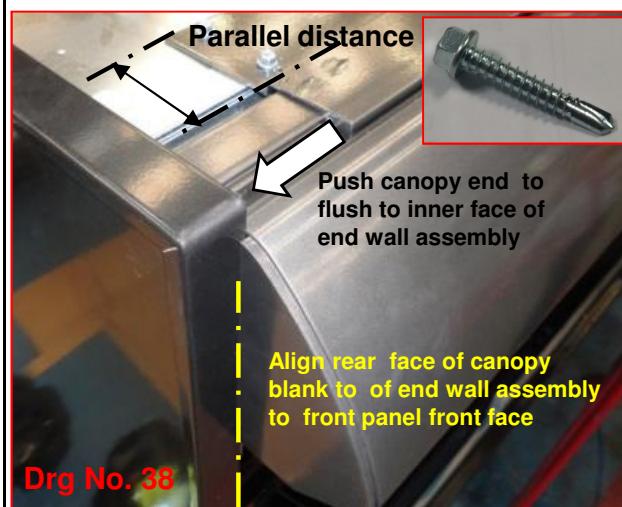
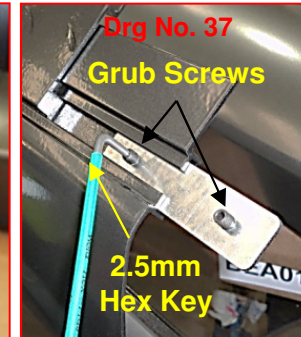
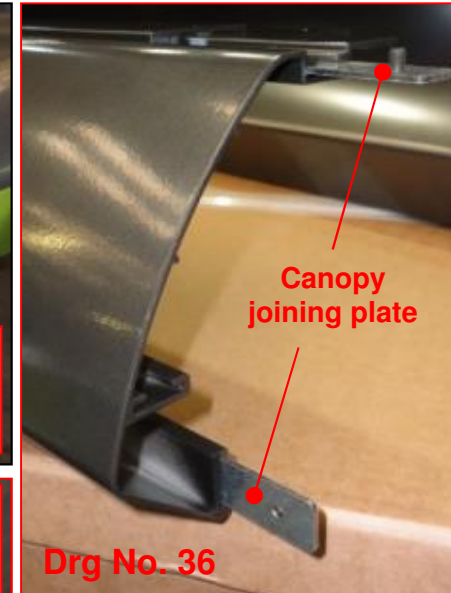
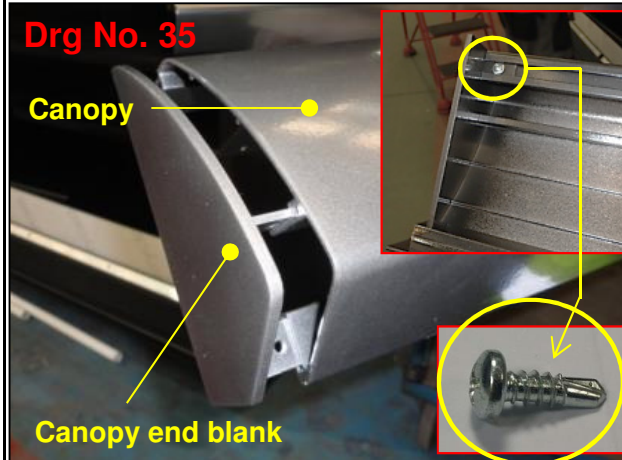
To start fit both the LHS and RHS canopy end blanks to the canopy configuration and secure with screw fixing. See drawing number 35.

Next, fit canopy (2 off) canopy joining plates at every RHS of joining / multiplexing canopies . Secure the canopy joining plates to the canopy via the pre fitted grub screws in the joining plate assembly. Use 2.5mm hex key. See drawing numbers 36, 37.

Install the 1<sup>st</sup> canopy assembly (complete with canopy end blanks and joining plates) to top of the superstructure. Align the canopy end to the fitted end wall assembly s shown on drawing number 38. The canopy end blank rear face sits flush with the front face of the end wall assembly and the canopy side face sits flush with the inner end wall face.

Align the canopy parallel with the cabinet superstructure, maintaining equal distances through the canopy assembly . Secure the canopy using fixing shown in drawing number 38.

Slide the joining canopy into the pre fitted canopy joining plates fitted to LHS canopy and secure with the canopy grub screws. Maintain the canopy fitting to the superstructure parallel . When fitting the last canopy to the last cabinet RHS end wall repeat the process align process above . If the fit is tight loosen of the end wall and slide canopy into position. Then re tighten the end wall assembly



# Standard Operating Procedure No 535

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Men:  Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

## 11. Pipe upstands

Start with fitting both the end pipe upstands to the superstructure top as shown on drawing numbers 40, 41, 42.

Align the end pipe upstand rear edge with the rear edge of the end wall assembly.

Align the end pipe upstand front face flush to the inner face of the end wall assembly. Secure to superstructure using fixing shown in drawing number 42.

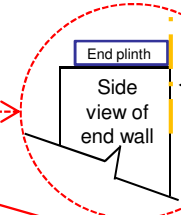
Fit front upstand panels to the end upstands and keep alignment parallel to superstructure front. Secure front upstands join at the middle and to superstructure using fixing shown in drawing number 42.



Front pipe upstand

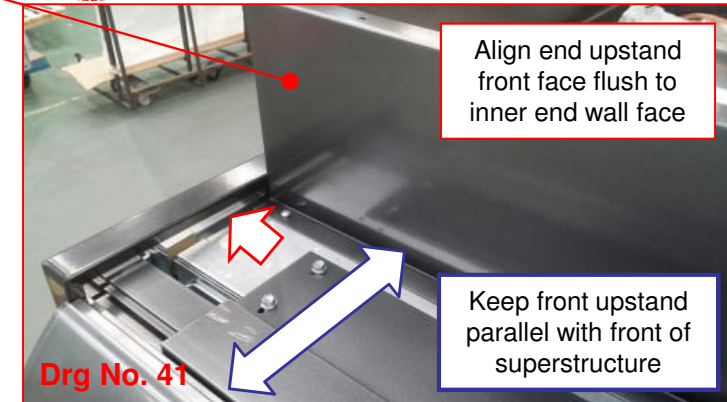
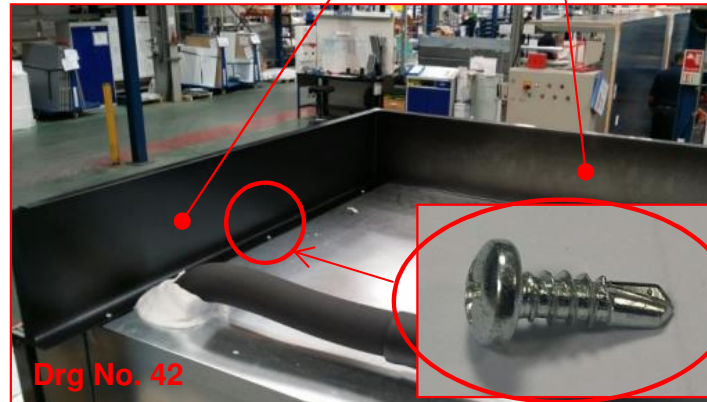
Front pipe upstands joining

End pipe upstand



Align end upstand rear edge with rear edge of end wall assembly

Front pipe upstand



# Standard Operating Procedure No 535

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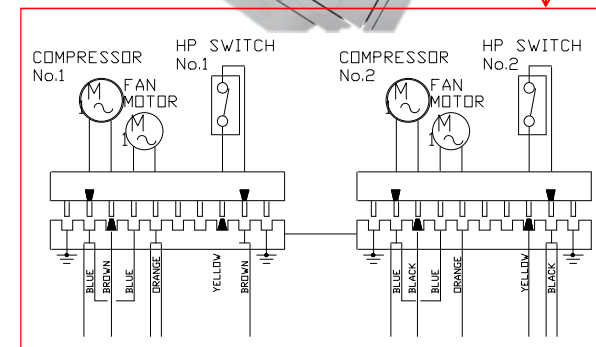
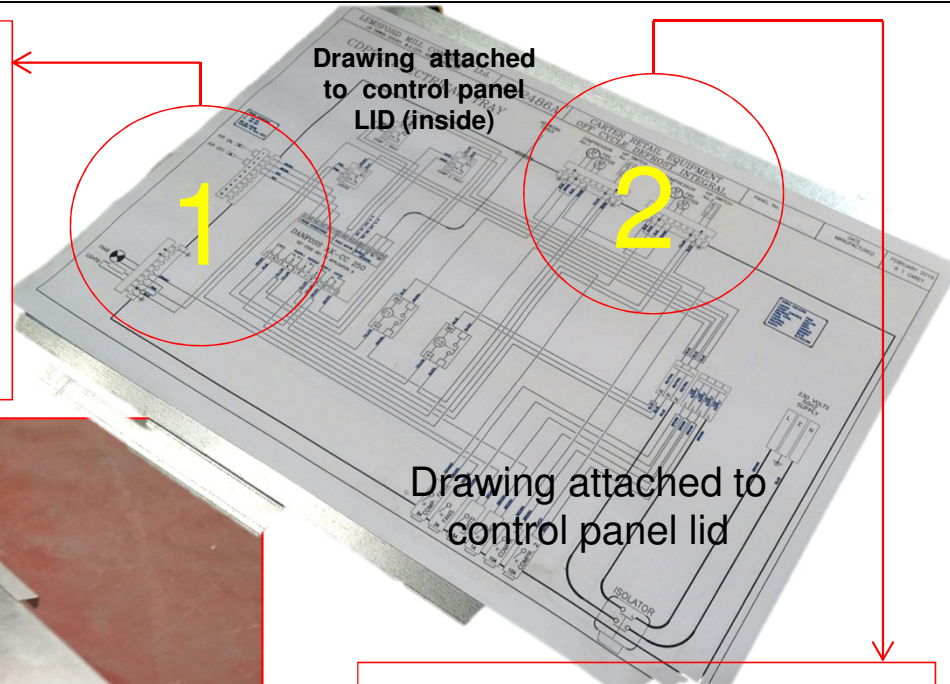
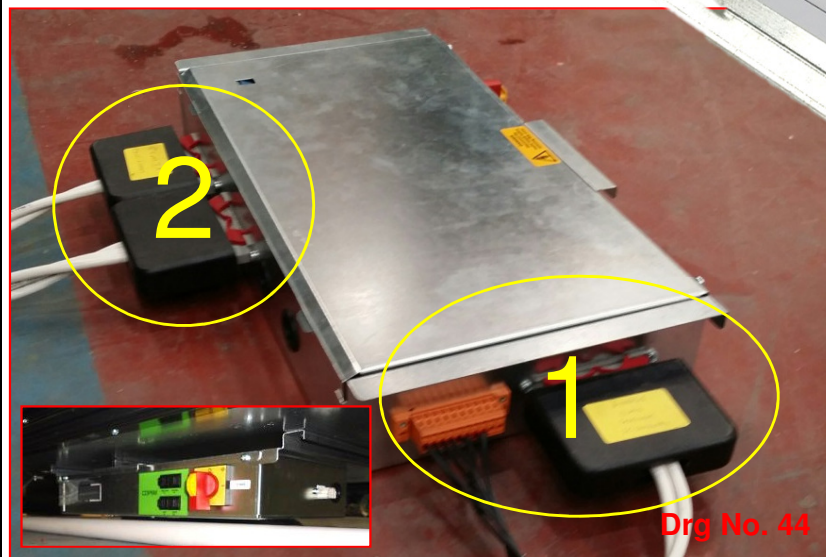
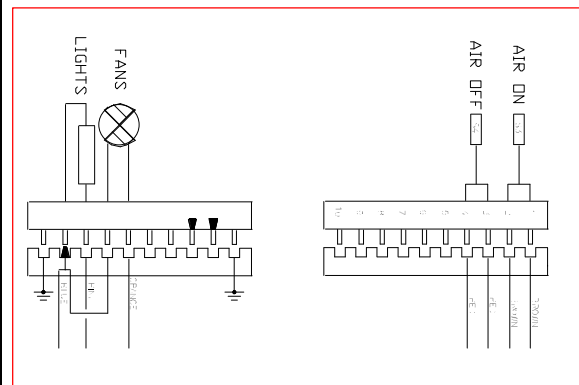
## 12. Control panel connections

Both sockets and plugs are fitted with coding pins, so each plug will only fit to its mating coded pinned socket. However if for some reason the coding pins are missing, open the control panel lid and look at the control panel drawing – areas 1 & 2 this will give you plug fitting locations - details: compressor no. 01, compressor no. 02, case loom and probe fitting. Also refer to each cable. Cables are identified with component names i.e. compressor no01, fans, H P switch etc. See drawing number 44.

Slide / fit the control panel to the gear tray runners. See drawing number 44. If the minimum 130mm height is not maintained in the cabinet levelling section the drainage pipework will not fit below the control panel assembly



Example only: Coding Pin



# Standard Operating Procedure No 535

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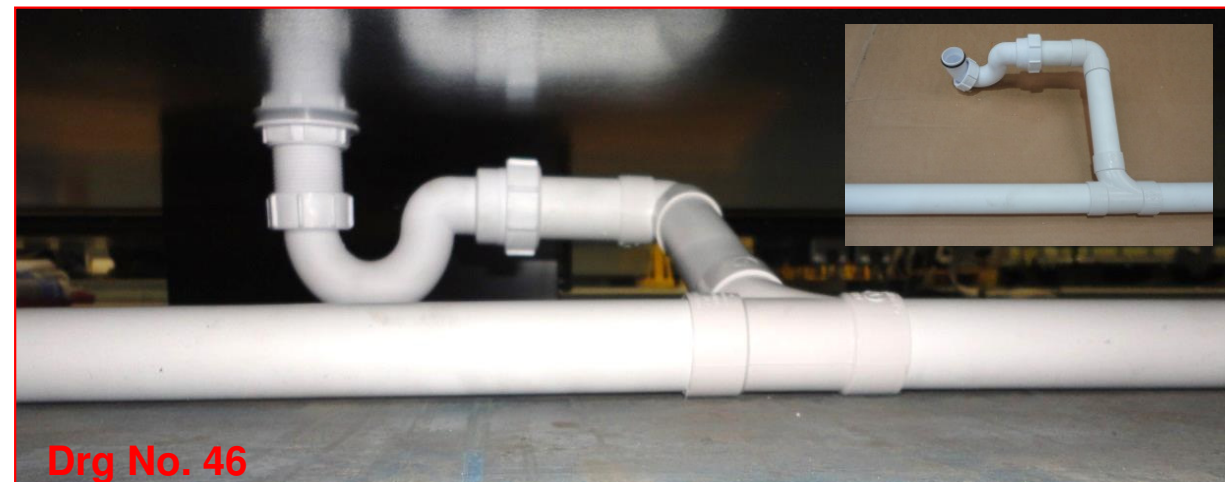
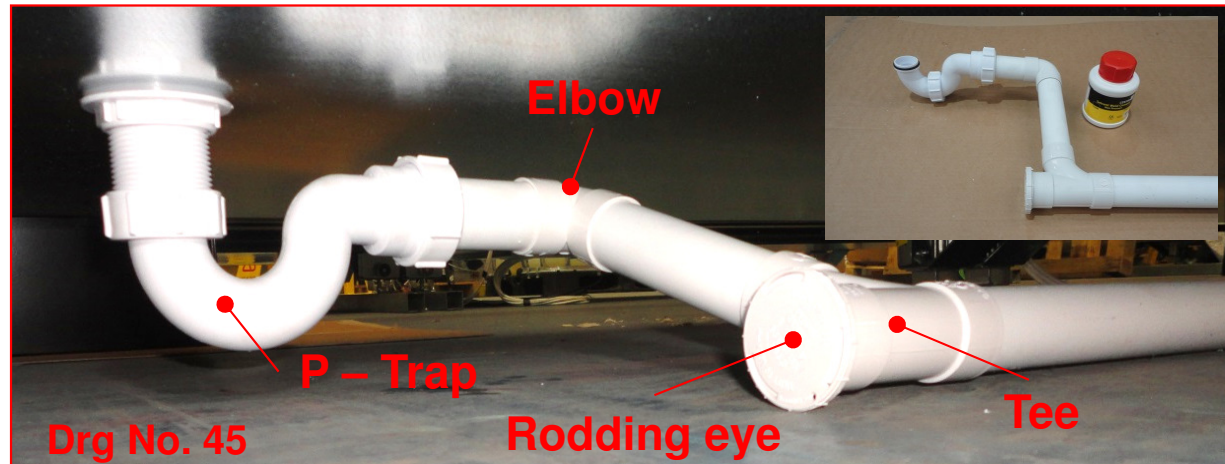
## 13. Drainage assembly

Drawing number 45 shows the drainage pipework configuration of the datum cabinet. The first cabinet of the multiplex run.



Drawing shows 46 shows the drainage pipework configuration of joining / multiplexing cabinets.

Secure all joints with solvent glue.

Keep pipework configuration in board of the front foot assemblies

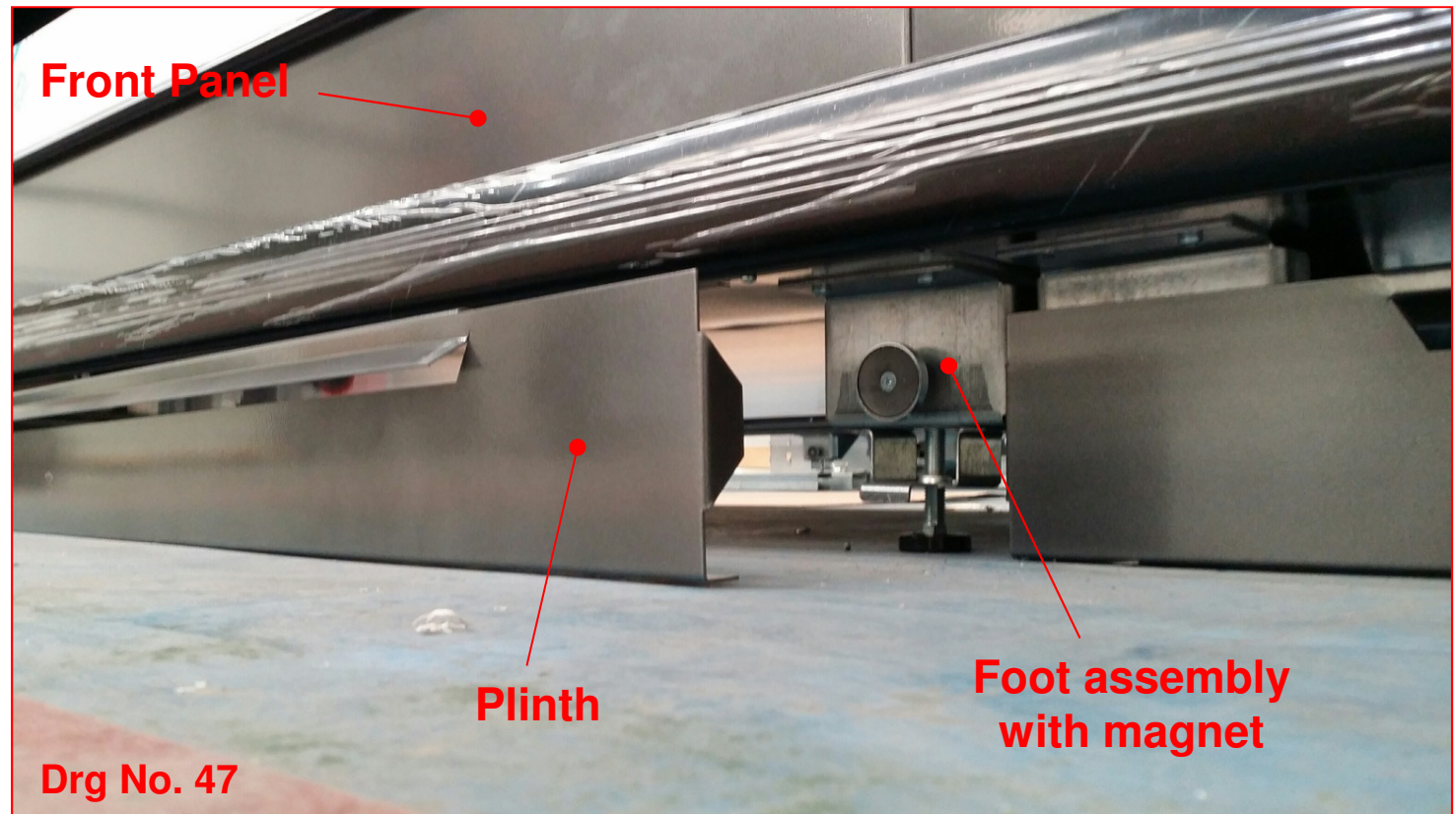


# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>		Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men: 	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

## 14. Plinth assembly

Align plinth assembly with the front panel and secure to the magnet fitted on the foot assembly

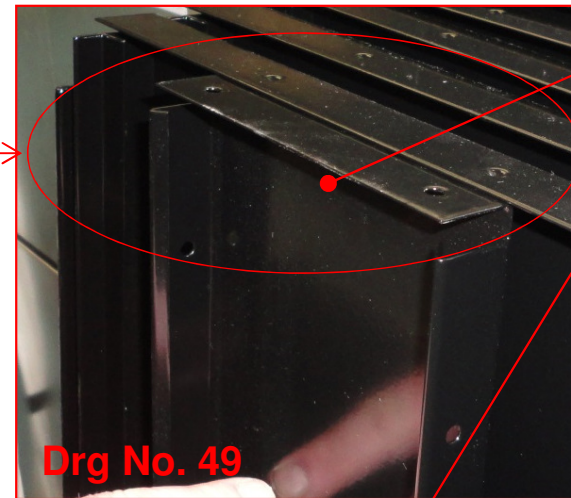
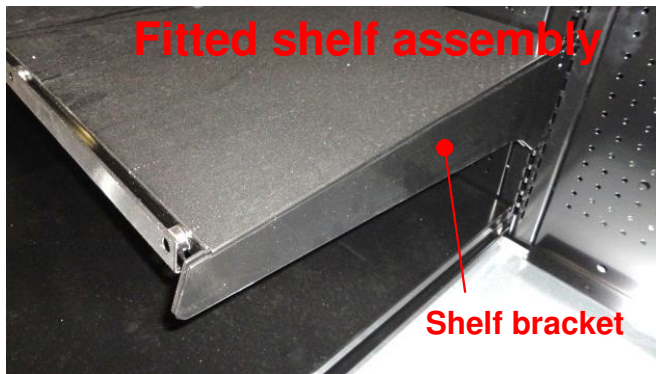


# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>		Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

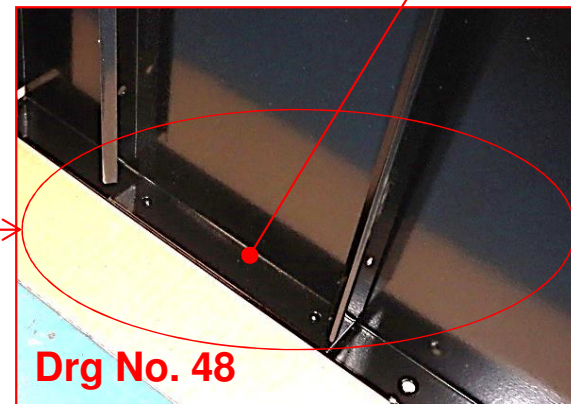
## 15. Shelf sub assembly - with snap on stiffener

Position one end the shelf stiffener side hole cut-outs to the protruding dimples on the shelf inner side shelf return (see drawing number 48), then push snap fit the top section of the other end of the shelf stiffener assembly (see drawing number 49).



Top section of the stiffener

Bottom section of the stiffener





# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>	Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:  Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

## 16. Ticket strip assembly

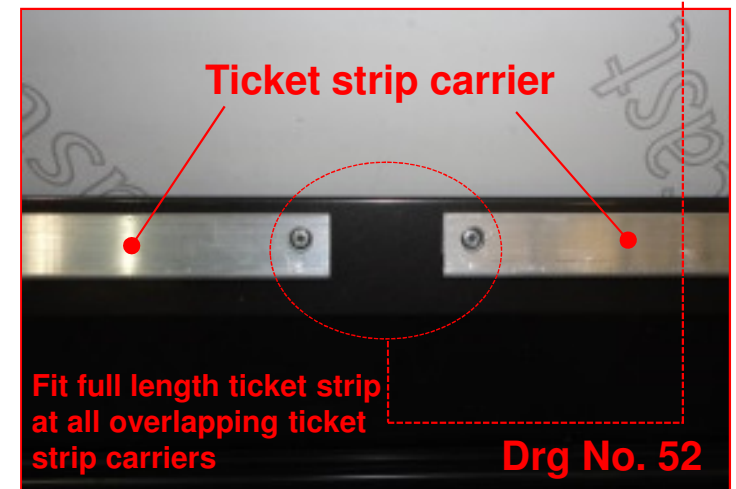
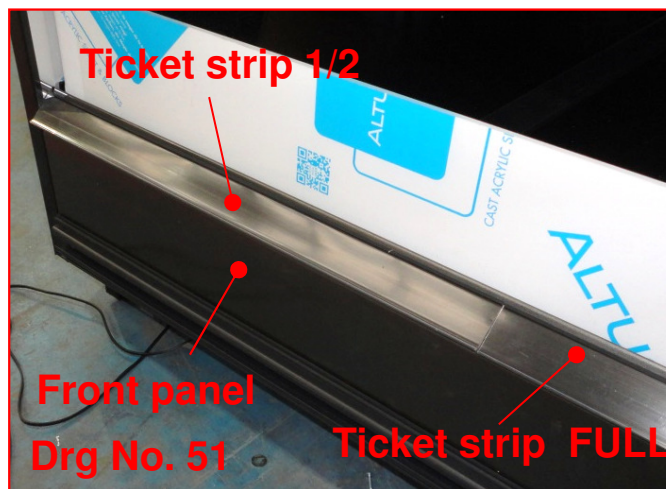
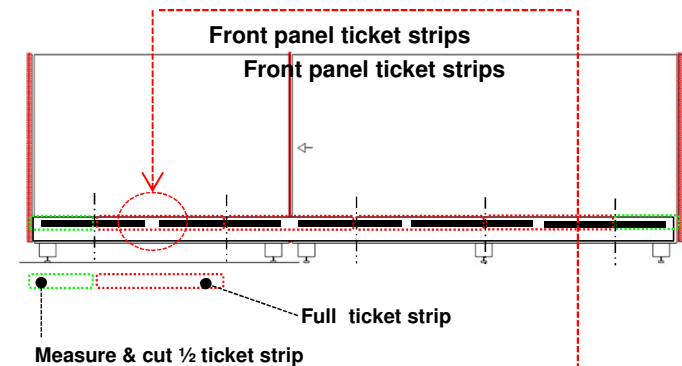
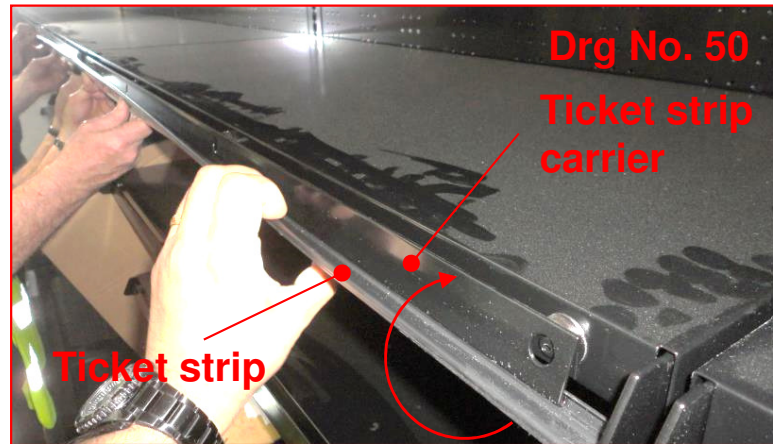
Ticket strips are fitted to both shelf assemblies and front panels.

### Drawing number 50 – Shelf assembly ticket strip

To fit the ticket strip hook the bottom edge of the ticket strip assembly in the bottom edge of the ticket strip carrier and the snap / push the top section of the ticket strip over the top edge of the ticket strip carrier.

### Drawing number 51, 52 – Shelf assembly ticket strip

Before fitting ticket strips to the front panel ticket strip carrier measure and cut a full length ticket strip to 1/2 its length. Starting from the LHS cabinet 1<sup>st</sup> bay fit the ticket strip. Same fitting process as mentioned above. Then continue with fitting full length ticket strip, until your last ticket strip is 1/2 length.



# Standard Operating Procedure No 535

Case / Model No: <b>Top Level Generic High Temperature Cabinets</b>		Task Description: Cabinet Installation Manual	Station No: Site	Issue No: 01
Men:	Duration:  N/A	Originator: Harpal S Bhamra	Reference Documents : N/A	

17. Condensing unit transport brackets

Remove the condensing unit lid.

Remove and discard front & rear compressor transport brackets from both LHS & RHS compressors. See drawing number 53.

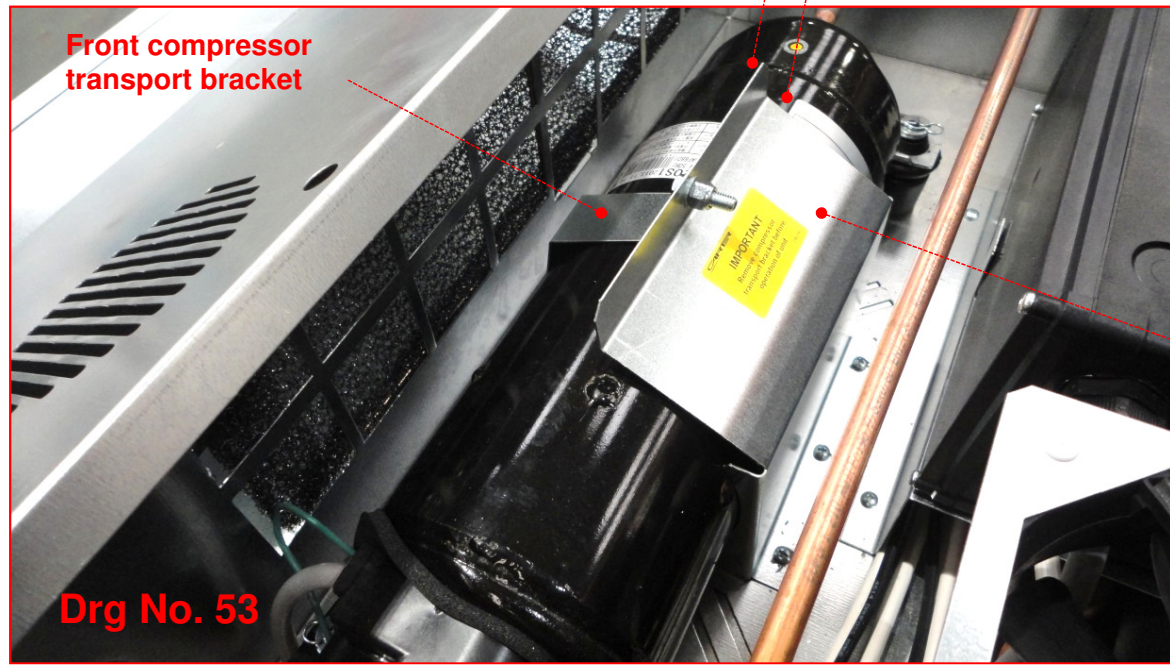
Note: Care must be taken not to bend or crush pipework inside and outside the condensing unit. Flammable refrigerant .



**Condensing Unit fitted on top of the superstructure**

**Front compressor transport bracket**

**Compressor**



**Front compressor transport bracket**

**Rear compressor transport bracket**

**Drg No. 53**