



PARTITIONING SYSTEMS



TECHNICAL DATA &
SPECIFICATION MANUAL

INTRODUCTION

Apton relocatable partitioning is manufactured in the UK to the highest standards and complies with the British Standards Kitemark for partitions and meets the strength and robustness requirements laid out for partitions detailed in BS 5234 and PSA Method of Build.

The system has been designed to offer a comprehensive choice of system performance and provide a range of styles and modules to suit most applications. Apton has been specifically designed for fast track installations whilst minimising disruption in the workplace. Door units, solid panels and window units are supplied pre-assembled allowing for a quick and clean installation.

Apton is a relocatable, internal non-load bearing demountable partition intended for use within normal office type environments. i.e. those environments which have a temperature range of between 10°C and 30°C. It is a maintenance free system and damaged panels should be replaced with new components. The Apton system is based on galvanised steel stud sections clad either side, with single or double layers of plasterboard panels finished in a covering of the customer's choice, all exposed steel sections are powder coated.

In addition to the standard configurations the system offers sliding hatch window units, single, double and hospital door units either full height or standard height with matching overpanel and sliding or double action swing alternatives. Apton also has a range of panel joint alternatives and can be fire rated to either 30 or 60 minutes with improved or high levels of sound performance.

Composition and Manufacture

Framework

Apton partitioning consists of a steel framework supporting plasterboard panels, modular windows and door units. The frame is constructed from vertical studs fixed at the base into a channel section floor track at 600mm centres. Studding and floor track are manufactured from galvanised rolled steel. Vertical studs are fixed at the head into a powder coated ceiling track channel. Galvanised horizontal channel sections (transoms) are fitted between studwork to secure window and door units.

Window Units

These are of a steel construction with glass flush to the front face of the window. Double glazed windows have glass flush to both sides of the window framing with or without integral venetian blinds pre-fitted. Glass is safety or fire resistant glass in accordance with current building regulations.

Door Units

Door frames are of a steel construction and leaves are pre-worked including vision panels, locks and hinges. Doors can be standard height, full height or standard height with matching overpanel. All doors are solid core and have concealed lippings as standard.

Solid Panels

These use 12.5mm plasterboard panels which can be pre-decorated in a covering of the customer's choice. Panels are secured at the floor with either 50mm or 100mm skirting, the top panel edges are concealed inside the ceiling track channel. Ceiling channel joints are concealed by a colour matched spring steel cover clip.

All panels are secured by a rolled steel clamping strip or top hat section fixed to either the vertical or horizontal steel sections with self-tapping screws. A colour matched trim or insert completes the installation. A smoothwall version of Apton using a concealed clip arrangement is also available.

SYSTEM OPTIONS

75mm Standard Apton - Non Fire Rated
75mm thick, galvanised internal framework, single skin plasterboard retained by rolled steel joint section or top hat section trimmed with colour co-ordinated trims, inserts and skirting. Door leaves are 44mm solid core, window units available in either single glazed, double glazed or double glazed with integral venetian blinds. Glass is clear toughened in accordance with BS6262.
75mm Apton - Improved Sound Insulation
As Non Fire Rated Apton but with cavity infill.
75mm Apton - F30 Half Hour Fire Rated
As 75mm Non Fire Rated Apton but solid core door leaves finished with intumescent strips or intumescent strip / smoke seal. Door units are supplied with timber frame and stud infills for doorframes and door closer(s). Window units are available in single or double glazed (with or without integral blinds). Glass to be selected from Georgian Wired Safety Glass or Pyrocet, both in accordance with BS6262.
100mm Apton – High Sound Insulation
100mm thick, galvanised internal framework, double-skin plasterboard retained by rolled steel joint section or top hat trimmed with colour co-ordinated trims, inserts and skirting. Door leaves are 44mm or 54mm thick solid core in steel frames. Solid panels have cavity infill. Window units are generally double-glazed with or without integral blinds. Glass is clear toughened in accordance with BS6262.
100mm Apton - F60 One Hour Fire Rated
As 100mm High Sound Apton but with 54mm solid core doors complete with intumescent strips or intumescent strip / smoke seal. Door units are supplied with timber infills for doorframes and door closer(s). The door units can supply fire resistance of 56 minutes for single doors and 52 minutes for double doors. Special timber frames are available where a full 60 minutes fire resistance is required. Only single glazed window units are available for one-hour fire resistance. See Apton Design Manual for further details.
Important Note
When specified, in order to comply with strength and robustness tests in accordance with BS5234 1992 or meet the performance standards in the BS Kite Mark for partitions, it is necessary to box standard Apton studs. These will need to be specified in addition to standard modules. Installation of such partitions must be strictly in accordance with the instructions in the Design Manual. Compliance with BS5234 or the Kite Mark cannot be applied to the Apton system where 44mm solid core doors are specified.



APPLICATIONS/APPEARANCE

Strength and Robustness Grades in accordance with BS5234 Part 1

All partitions have to withstand the various static and dynamic loads caused by people leaning or falling against them, being struck by furniture or equipment, slamming of doors, the weight of bookshelves/cupboards etc. BS5234 Part 1 defines 4 strength grades (categories) and the environment most suited to each grade.

Grade	Category of Duty	Examples
Light Duty (LD)	Adjacent space only accessible to persons with high incentive to exercise care. Small chance of accident or misuse	Domestic accommodation
Medium Duty (MD) 75mm Apton System	Adjacent space moderately used, primarily by persons with some incentive to exercise care. Some chance of accident occurring or misuse	Office accommodation
Heavy Duty (HD) 100mm Apton System	Adjacent space frequently used by the public and others with little incentive to exercise care. Chances of accident occurring or misuse	Public circulation areas Industrial areas
Severe Duty (SD)	Adjacent space intensively used by the public and others with little incentive to exercise care. Prone to vandalism and abnormally rough use	Major circulation areas Heavy industrial areas

75mm Apton has passed all tests in accordance with BS5234 Part 1 and has been categorised as a Medium Duty partition.

100mm Apton has passed all tests in accordance with BS5234 Part 1 and has been categorised as a Heavy Duty partition.

Door Units

Door sets supplied complete. Door leaves hinged and morticed with escape lock carcass fitted. Single door leaves supplied hung in their frames. Standard height doors 2040 x 826mm (926mm leaves available) while full height doors and standard height doors with matching overpanel are also available.

The following veneers are regularly supplied by Apton and can therefore be regarded as standard: Koto • Crown Cut Ash • Steamed Beech • White Oak • Cherry (not stocked) • Maple • Sapele • Paint grade plywood (unfinished). Other veneers are available on request.

APPEARANCE (continued)

All steel exposed framing sections, top hat/omega joint trim and 100mm aluminium skirting and joint trim sections are available from the colours listed below:

COLOURLINE

Colour Name	RAL / BS / CD Reference	Order Code
Dark Brown	RAL 8019	B
Sand	BS 08 B 17	D
Granite	BS 00 A 05	N
Grey	RAL 7035	G
Iron Bridge	RAL 7011	I
Blue	RAL 5017	U
Sapphire	RAL 5003	S
Heather	CD 2010-R50B	H
Crocus	CD 2020-R80B	C
Black	BS 00 E 53	J
White	BS 00 E 55	W
Burgundy	RAL 3004	E
Mint	CD 2010-B70G	M
Pine Green	RAL 6028	K

TIMBERLINE

Colour Name	RAL / BS / CD Reference	Order Code
European Oak	None	*

SILVERLINE

Colour Name	RAL / BS / CD Reference	Order Code
Alloy	RAL 9006	A
Patina Chrome	Specially formulated	P
Gold Dust	Specially formulated	V
Wavecrest	Specially formulated	Z
Lightning	Specially formulated	L
Moonstone	Specially formulated	Q
Mulberry	Specially formulated	F
Purple Slate	Specially formulated	T
Red Granite	Specially formulated	R

NB. Plastic components such as skirting (50mm standard and 50mm top hat flush types), contour trim and top hat/omega inserts are only available in the Colourline range of colours. Skirting and trim available for the Timberline finish is both the standard 50mm skirting and 100mm aluminium skirting with contour trim. Other RAL/BS colours are available on request.

Wall Coverings

Solid panels can be supplied pre-decorated in a wide range of paper or fabric backed vinyls to suit a multitude of styles and tastes. Steel faced or laminated panels are also available on request.



PERFORMANCE SUMMARY

SYSTEM OPTIONS	75mm Apton Standard	75mm Apton Improved Sound	75mm F30 Apton Half-Hour Fire Resistance	100mm Apton High Sound	100mm F60 Apton One Hour Fire Resistance
DIMENSIONS					
Module Thickness	75mm	75mm	75mm	100mm	100mm
Standard Trim Module Width	1200mm	1200mm	1200mm	1200mm	1200mm
Smoothwall Module Width	1200mm	1200mm	1200mm	1200mm	1200mm
Top Hat Trim Module Width	1215mm	1215mm	1215mm	1215mm	1215mm
Heights	2.4-4.5m	2.4-4.5m	2.4-4.5m	2.4-4.5m	2.4-4.5m
SOUND Rw					
Solid Module	35dB	43dB	35dB	50dB	50dB
1/2 Glazed Module - Double Glazed (with Infill)		39dB	39dB	39dB	
Door Head Double Glazed Module with Infill		36dB	36dB	36dB	
Full Height Double Glazed Module	35dB	35dB	35dB	35dB	
WEIGHT					
Kg/m ²	22	23	23	45	45

Additional notes on fire resistance.

Above 3.6m half-hour fire resistance partitions must contain cavity infill.

Maximum size for half-hour fire resistant glazing single/double (Integrity only).

GWSG 2.1m x 1.2m

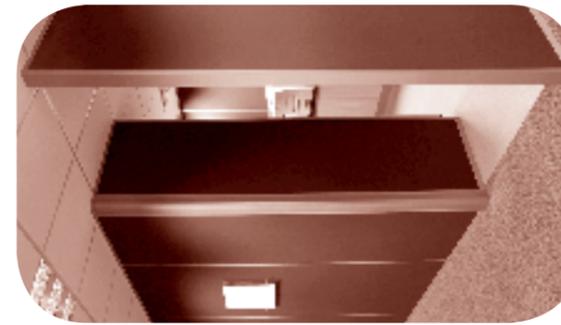
PYROCET 2.8 x 1.2m

Maximum size for one hour fire resistant partitions, single glazing only.

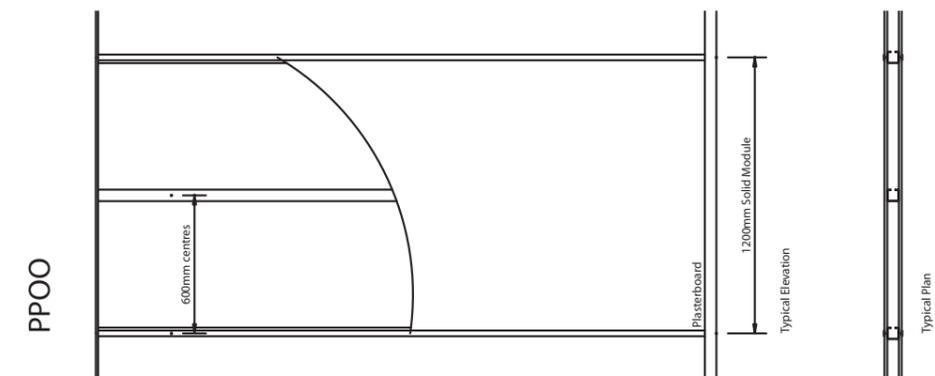
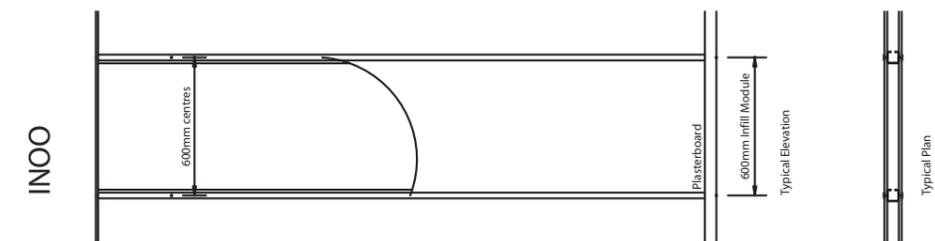
GWSG 1.2m x 1.2m

PYROBEL 1.5 x 1.2 (Glass is 16mm and carries 30 minute insulation).

When used with a suitable wall covering Apton panels meet with Class O spread of flame.



Solid Modules 2.4 - 3.6m high
 All modules supplied complete in a covering of the specifier's choice.
 Specify INOO for all solid requirements 0-600mm
 Specify PPOO for all solid requirements 601 - 1200mm



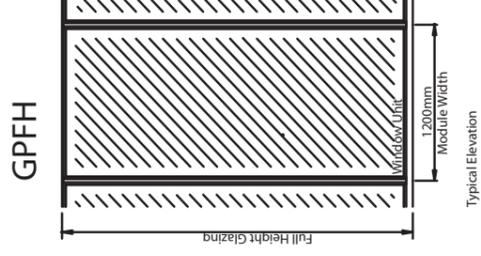
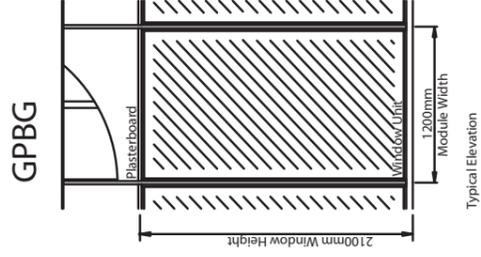
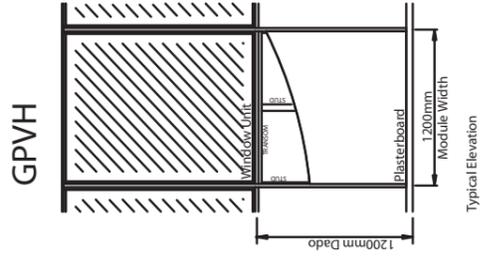
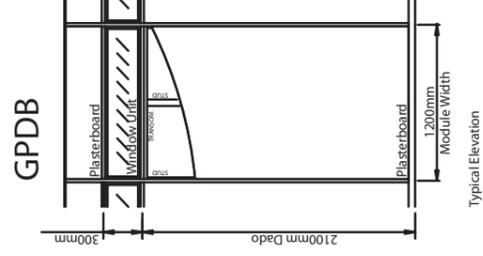
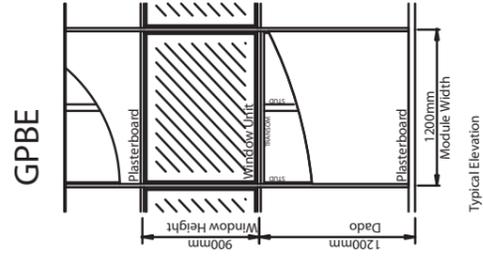
SOLID MODULES

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SOLID MODULES

GLAZED MODULES

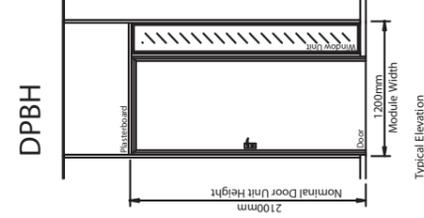
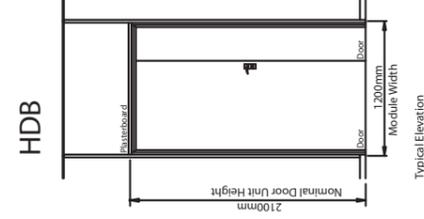
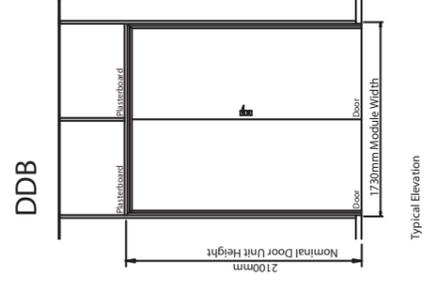
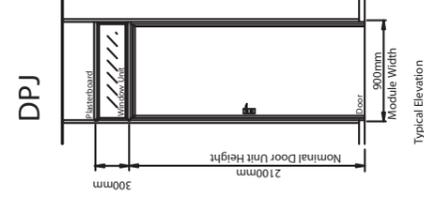
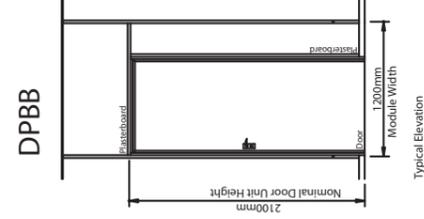
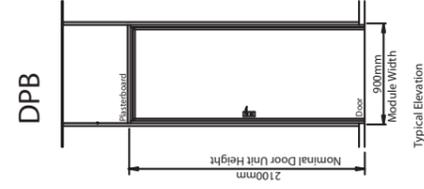


Glazed Modules 2.4 - 4.5m high
Maximum full-height window module 3.0m
All glass supplied in accordance with B.S 6262, including fire rated glazed units

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GLAZED MODULES

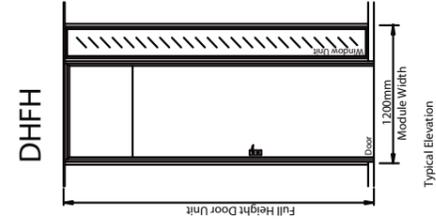
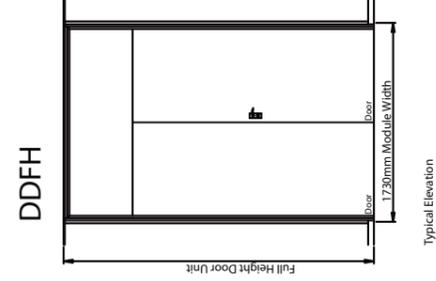
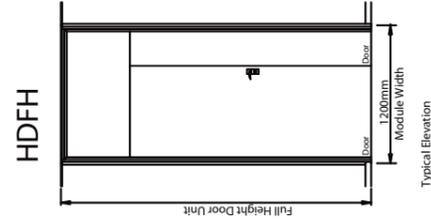
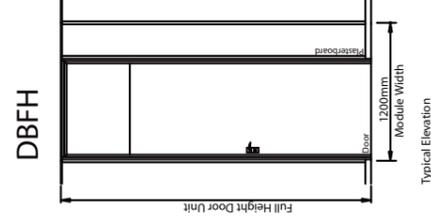
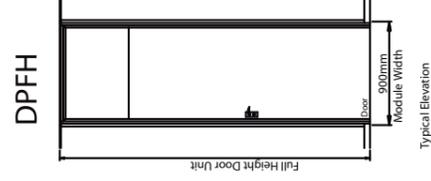
STANDARD HEIGHT DOOR MODULES



Door Modules 2.4 - 4.5m high
Dimensions are nominal overall frame sizes

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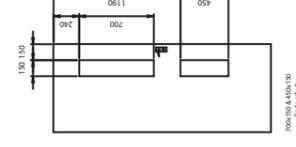
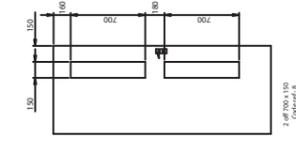
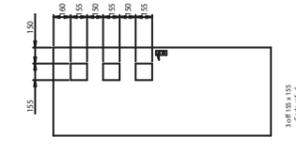
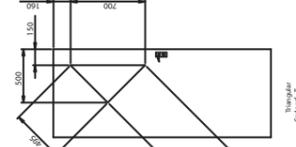
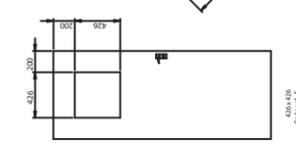
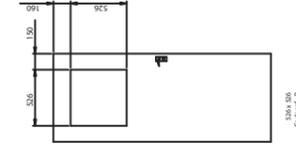
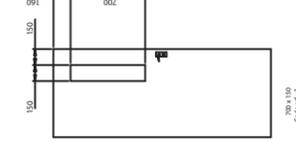
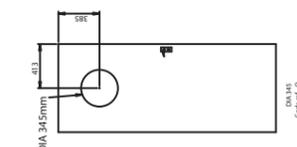
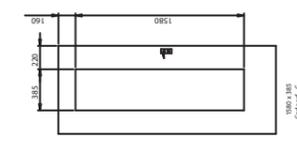
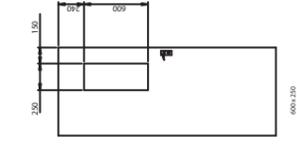
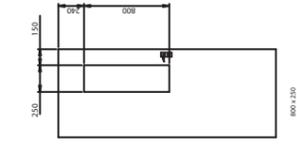
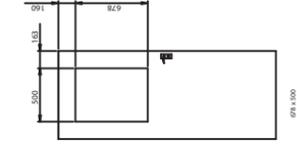
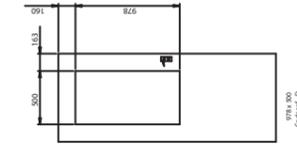
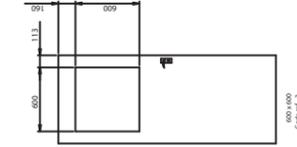
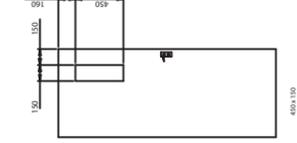
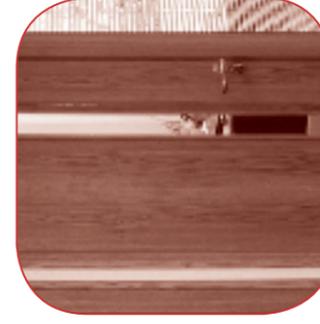
FULL HEIGHT DOOR MODULES
All with Optional Timber Overpanels



Door Modules 2.4 - 2.995m high
Dimensions are nominal overall frame sizes

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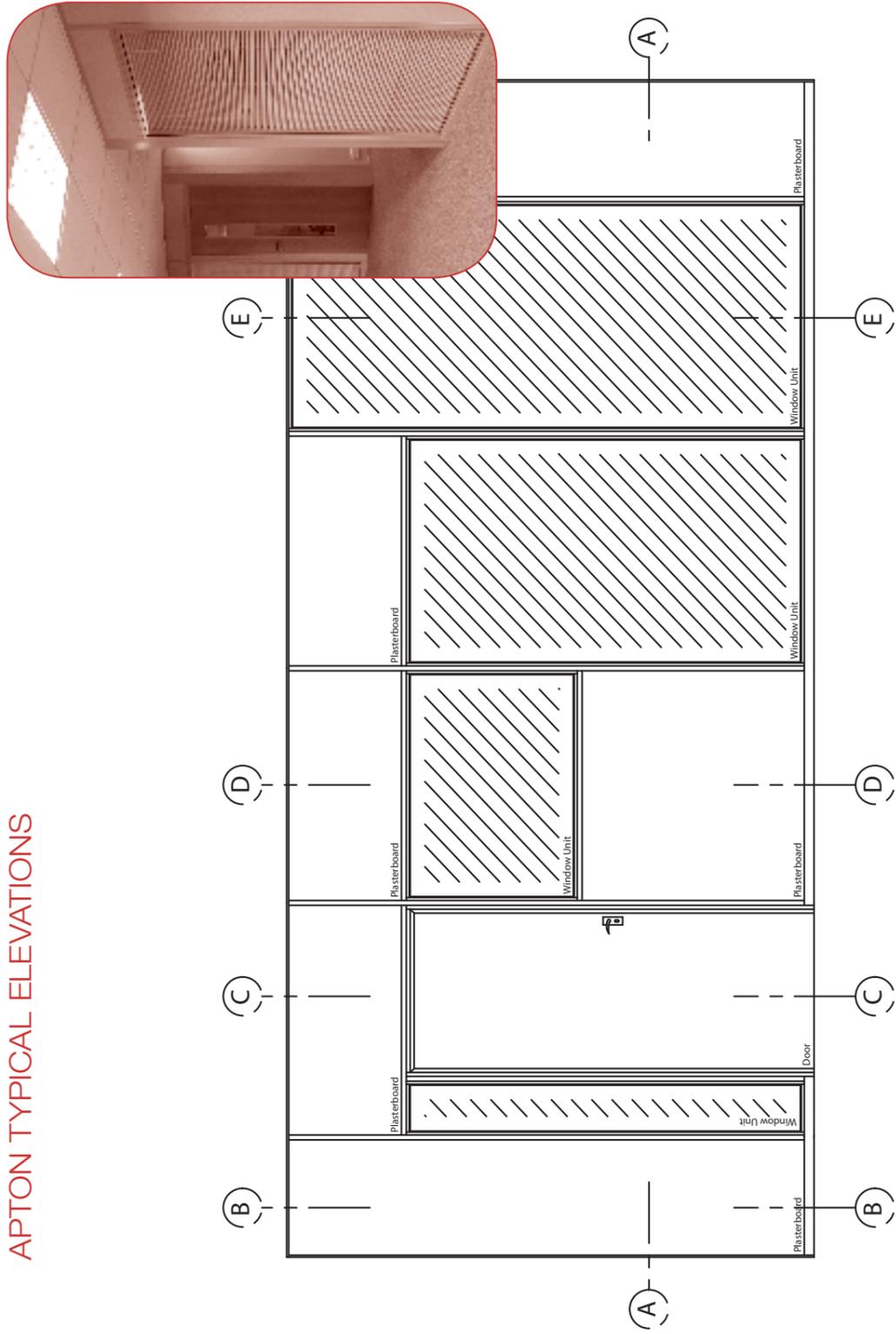
VISION PANELS



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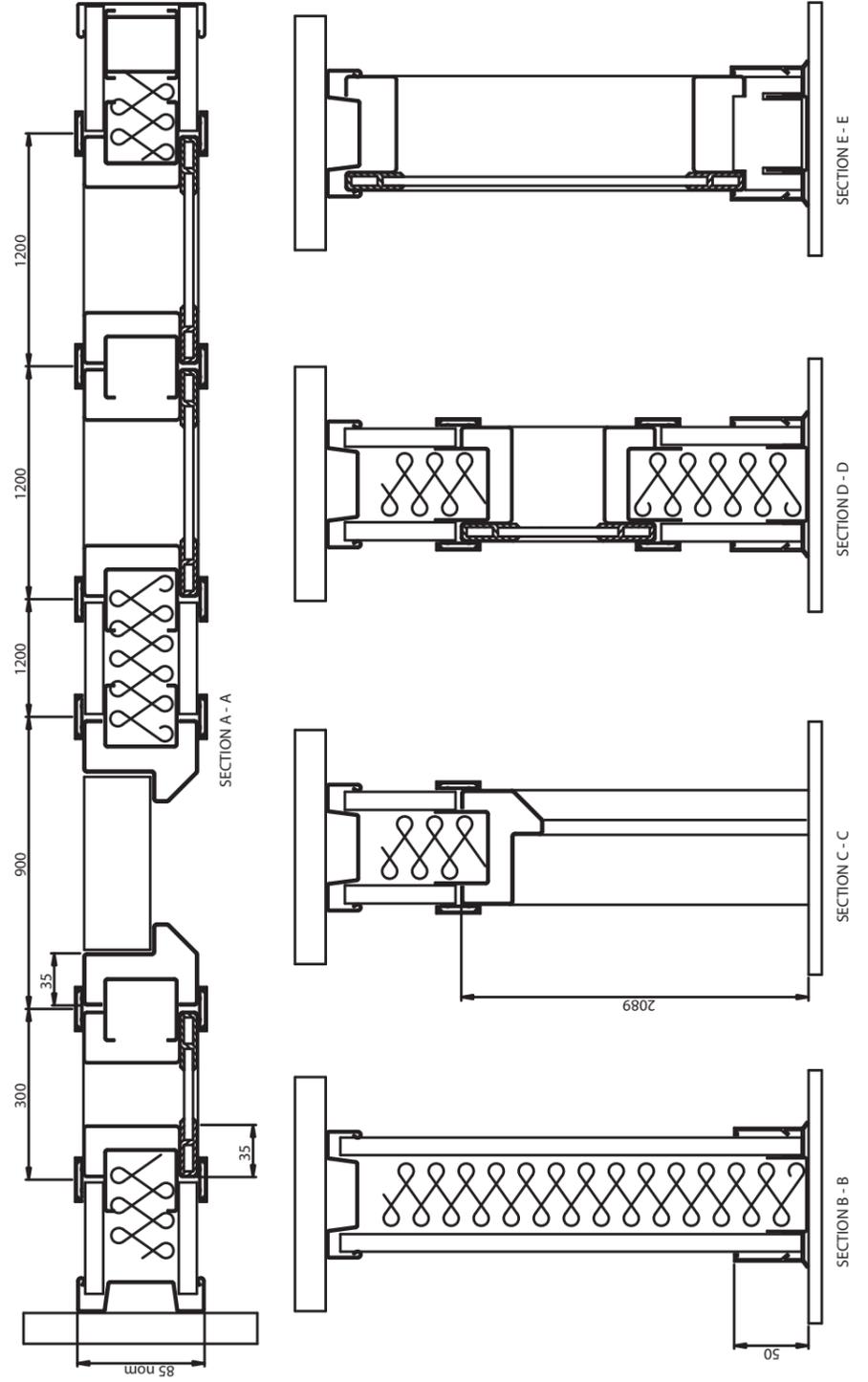


APTON TYPICAL ELEVATIONS



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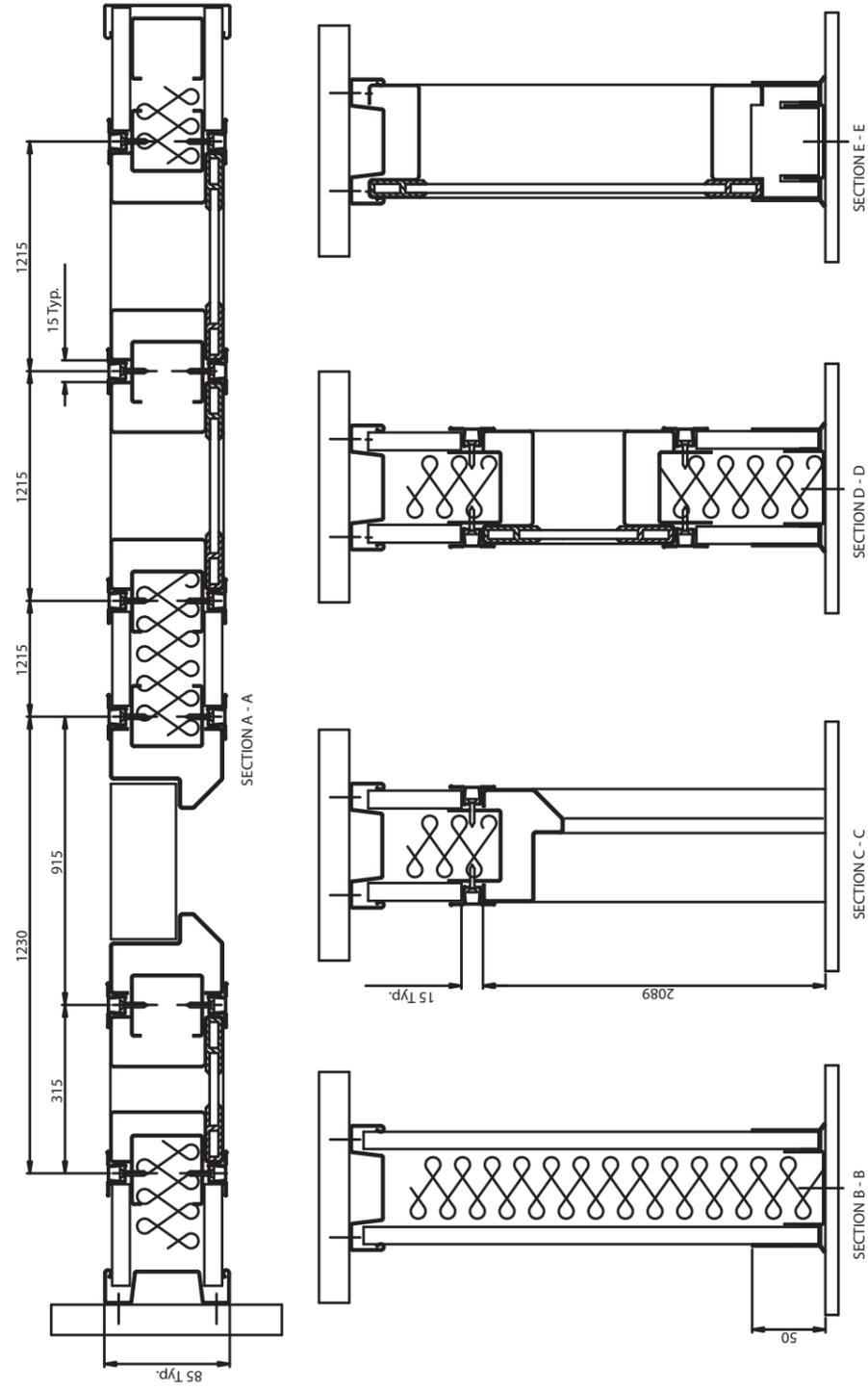
75mm STANDARD TRIM SECTIONAL DETAIL



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75mm TOP-HAT TRIM SECTIONAL DETAIL

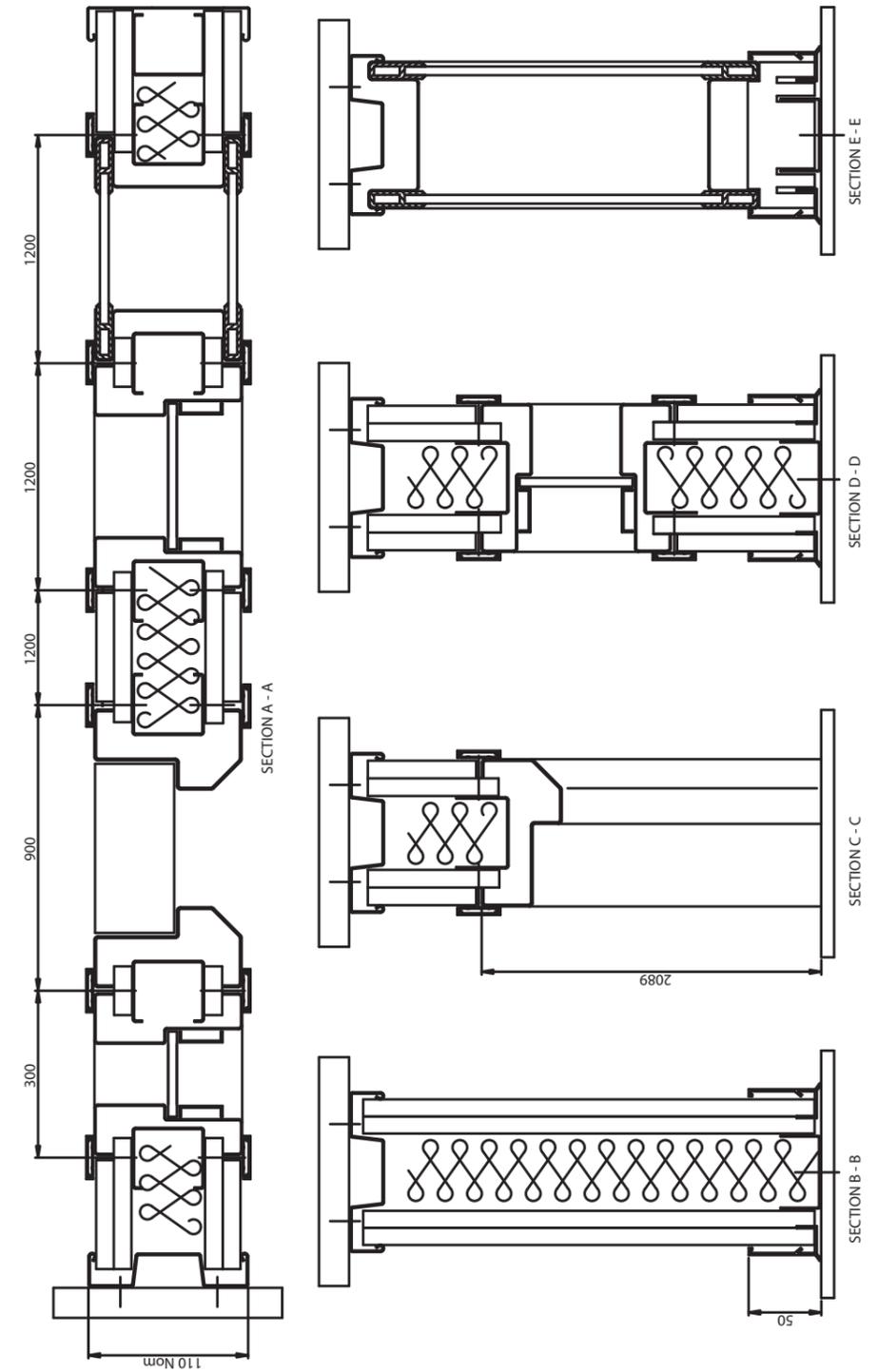


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75mm TOP-HAT TRIM SECTIONAL DETAIL

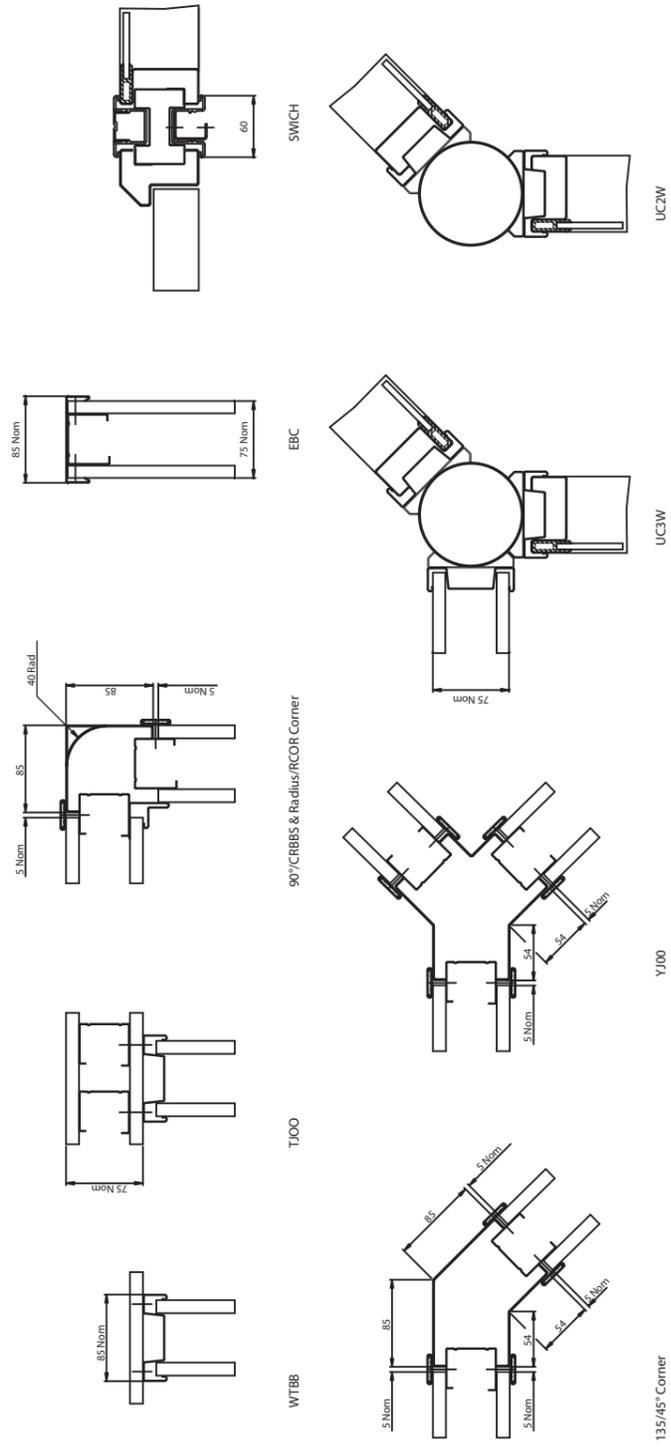
100mm STANDARD TRIM SECTIONAL DETAIL



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100mm STANDARD TRIM SECTIONAL DETAIL

75mm STANDARD TRIM JUNCTIONS/
CORNERS SECTIONAL DETAIL

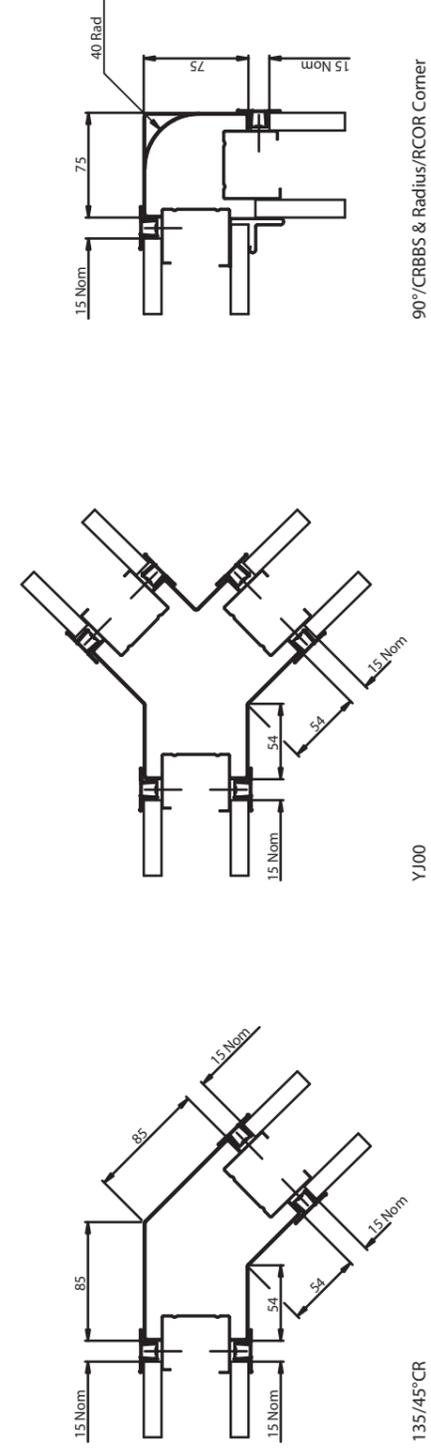


135/45° Corner

Not to scale

75mm STANDARD TRIM JUNCTIONS/
CORNERS SECTIONAL DETAIL

75mm TOP-HAT TRIM JUNCTIONS/
CORNERS SECTIONAL DETAIL (That differ from standard)



135/45° CR

Y100

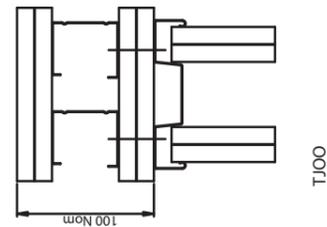
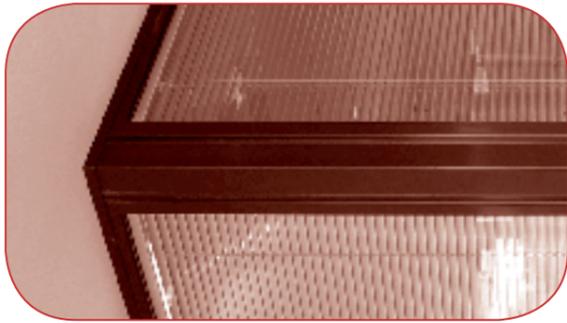
90°/CRBBS & Radius/RCOR Corner

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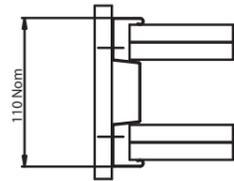
75mm TOP-HAT TRIM JUNCTIONS/
CORNERS SECTIONAL DETAIL



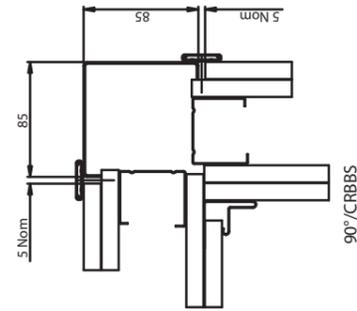
100mm STANDARD TRIM JUNCTIONS/
CORNERS SECTIONAL DETAIL



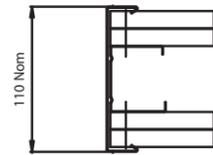
T100



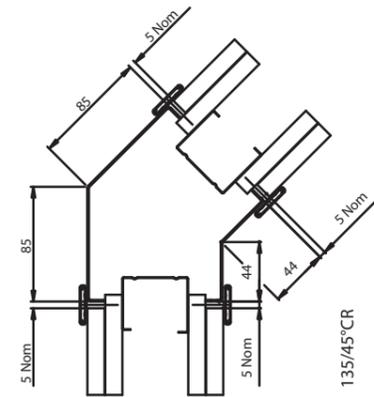
WTBB



90°/CRBBS



EBC



135/45°CR

Not to scale

SITework, MAINTENANCE AND SERVICE

Storage

Panels across timber bearers or on polythene sheets over flat concrete floor, steel sections and plastic stored flat. Door leaves should be kept covered and stored out of direct sunlight.

Preparatory Site Work

Installed after building is weatherproof and most internal finishes are completed. Installation instructions available from Apton Partitioning Ltd.

Services, all ranges:

- Stud members are pre-punched to accommodate horizontal service cables up to 20mm in diameter. Additional holes in partition members can be cut on site.
- Cables must be protected by grommets where they pass through metal members.
- As an alternative, full height switch posts are available.
- Consideration should be given to the expected maximum building deflection when installing pipe-work and conduit.

Maintenance

Should the need arise for relocation, installation of fixtures or maintenance (except cleaning), please consult your installer or Apton Partitioning Limited, John Dickinson Enterprise Centre, London Road, Hemel Hempstead, Hertfordshire, HP3 9QU.

Apton Partitioning Limited recommend that all of the above should be undertaken by Apton registered Interior Centres or Distributors.

Daily - General cleaning for removal of normal office dust etc.

Quarterly - Hinges used with 44mm thick door leaves are fitted with maintenance free oil impregnated bushes, which never require lubrication.

Hinges used with 54mm thick leaves will require to be lightly oiled quarterly.

Cleaning details are as follows: -

a) Vinyl Cleaning: Vinyl wall coverings are completely washable. Moderate soiling can be removed by the use of a warm detergent solution and a damp cloth. If the wallcovering has a deep emboss, a fine bristle brush can be used. Wipe off with clean water and ensure the skirting is dry.

Always wash from the bottom upwards as top to bottom will cause runs to dry on surface which will stain.

Stubborn stains can be treated with vinyl/upholstery cleaner and a moderate amount of scrubbing. Use cleaner in strict accordance with the manufacturer's instructions.

The use of strong bleach or abrasive powders is not recommended.

If in doubt, do a trial in an inconspicuous area.

b) Glass: Use a mild detergent solution then rinse glass well with clean water and dry off. Do not use any abrasive cleaning products or contaminated cloths. If rainwater coming from cement mortar comes into contact with the surface of the glass, clean frequently, otherwise staining might occur.

c) Rigid PVC: Manufacturer recommends that if it becomes necessary to clean the PVC sections then you should use a mild detergent, set down in water and applied with a soft cloth. Under no circumstances should a solvent-based cleaning fluid be used.

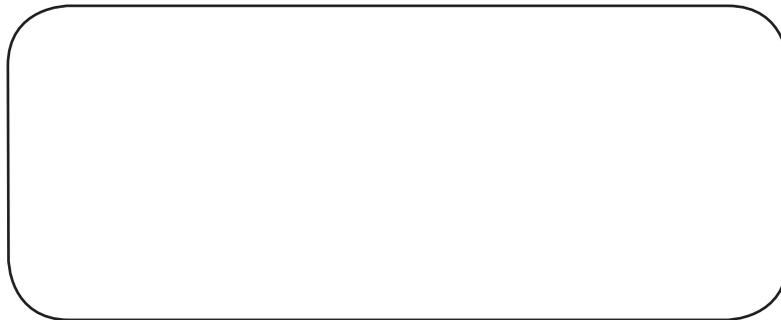
d) Door Veneer: Use standard wood cleaner; use cleaner in strict accordance with manufacturer's instructions.

e) Steelwork: If it becomes necessary to clean steelwork, then you should use a mild detergent, mixed with water, or white spirit applied with a soft cloth. Do not use abrasive creams or papers, or alkaline substances such as soda.

Silverline finishes are not a metal but a paint finish, white spirit is the best cleaner, which will remove greasy marks, liquid paraffin could be used if necessary to provide a uniform mark free finish. It must be noted however, that Silverline finishes should not be subject to vigorous rubbing as this could adversely affect the gloss and metallic silvery appearance. Do not use abrasive creams or papers, or alkaline substances such as soda.



100mm STANDARD TRIM JUNCTIONS/
CORNERS SECTIONAL DETAIL



Apton is distributed and installed by an international network of approved independent dealers and installation specialists. This ensures that whatever your project you can be assured of both first class service and fair and competitive pricing.

Designed and manufactured in the UK.



Apton Partitioning Ltd, John Dickinson Enterprise Centre,
London Road, Hemel Hempstead, Herts, HP3 9QU, UK
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www.apton-partitioning.com