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LOGIKA 6000 – 100mm FRAMING SYSTEM SPECIFICATION & TECHNICAL MANUAL

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Logika 6000 SUMMARY FEATURES & BENEFITS

1 The **LOGIKA 6000 GLAZING & DOOR FRAME SYSTEM** is designed for incorporation into100mm wide STUD and SHEET Gypsum faced partition systems as defined under BS5234: part 1:1992 definition for partition structures. It is capable of satisfying the criteria for Medium Duty, Heavy Duty and Severe Duty determined by the choice of panel facing and internal structure selected from its range of components. LOGIKA 6000 GLAZING FRAME complies fully with BS6262 for "edge cover" and "back clearance" enhancing safety.

2 **Versatility**: The system provides a range of extruded aluminium profiles that can be combined within a number of standard plasterboard and stud combinations offering a range of performance characteristics up to 3600mm high. All acoustic and fire performances are achieved within a common set of profiles that can either cloak a standard 100mm wall thickness or be installed with "shadow reveal" interface between the glazing/door frames and adjacent solid partitions.

3 **ACOUSTIC PERFORMANCE:**

LOGIKA 6000 can provide from 35dB Rw up to 48dB Rw sound performance (solid partitions). Acoustic and fire upgrades to glazing can be performed at ANY time (i.e. during a reorganisation of a work area) as ALL MAIN FRAMEWORK PROFILES REMAIN IN PLACE reducing disruption and cost.

SOLID	35dB, 42dB, 45dB, 48 dB and 52dB (Rw) options (based on standard Gypsum constructions)
TIMBER DOOR SETS	Single Doors: 30 - 36dB Rw (subject to seal configuration and door leaf thickness).
GLAZING	Single Glazing: Up to 38dB Rw (single acoustic laminate).
	Double Glazing: Up to 45dB Rw (double glazed).
SINGLE GLAZED DOOR SETS:	30dB Rw for 12mm toughened glass in rebated sealed door frame.

4 **FIRE PERFORMANCE:**

LOGIKA 6000 system provides up to 90 minutes fire rating in solid elevations (standard Gypsum construction)

SOLID	UP TO 90 minutes using Logika 2000 solid construction with 75mm studs in lieu of 48mm studs.
TIMBER DOORS	30 minutes in door elevations (a 44mm timber door leaf has been tested to 37 minutes in Aluminium frame)
	60 minutes integrity and insulation Timber door leaf in Timber frames
GLAZING	60 minutes integrity only in glazed elevations

SOLID elevations Joint Options:

Option A	Flush filled for a smooth permanent look.
Option B	Cover strip modular joints (fire rated).
Option C	Top hat cover strip (with or without integral shelving strip non fire rated)
Option D	Feature joint with cover strip and colour co-ordinated insert (fire rated)

5 **Logika 6000 GLAZED elevations:**

A full range of clip in secondary profiles accept offset single, centre single and double glazing in glass thicknesses from 6 to 12.8mm. An option (to special order) for glass thicknesses up to 15mm is also available.

Glazing Options:

5.a Standard framed Glazing

I.)	Single offset glazing:	6mm, 8mm, 10mm, 12mm, 12.8mm (15mm to order).
II.)	Single Centre Glazed	6mm - 8mm
III.)	Double glazing:	6+6, 6+7.5, 6+8, 6+10 / 7.5+8, 7.5+10, 7.5+12, 7.5+12.8 / 8+8, 8+10, 8+12, 8+12.8 / 10+10, 10+12, 10+12.8 / 12+12, 12+12.8
		The above options can be supplied with INTEGRAL BLINDS.

5.b Slimline "Frameless" Glazing

I.)	Single offset glazing:	10mm, 12mm, 12.8mm Glazing compatible with Logika 5000 Slimline system
II.)	Double glazing:	With Clear Ghost post: 6+6, 6+7.5. 6+8
		"Mullion Free" 10+10, 10+12, 10+12.8, 12+12, 12+12.8
		*Can be supplied with electric tilt INTEGRAL BLINDS.

Note: manual tilt blinds can only be operated from controls mounted in adjacent solid or Door frame posts. Up to 3 blinds can be operated in this way (per control) i.e. Max 6 blinds per run with a control at each end

6 **LOGIKA Architectural Ironmongery and Door Configurations**

The Logika 6000 system offers a full range of high quality compatible stainless steel ironmongery and a full range of door configurations including:

For Timber door leaves a range of "clip on" door stop sections allow 45mm and 54mm thickness.

For Glass door leaves we offer a stop for single glass door leaves up to 12mm thickness, and for 47mm flush double glazed door leaves to be fitted.

AVAILABILITY AND SERVICE: -

The **LOGIKA** framing systems are offered in ANY colour from the RAL or BS4800 range within 7-10 days of order receipt. Special door veneers may take up to 4 weeks to produce. In the event of URGENT needs SMALL QUANTITIES of coated material may be processed within 3 working days. If you have a large ongoing requirement we are prepared to consider stocking your specific colours in regularly used sections for Ex-Stock availability. All main profiles are held in stock coated in RAL 9010 and RAL 9006.

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1. GENERAL DESCRIPTION:

1.0 SYSTEM TYPE:

LOGIKA 6000 aluminium framing system provides a range of primary profiles and clip-in secondary sections that can be used to form glazing and door openings within wall constructions in building fit out projects

The system is readily upgraded for acoustic and fire performance; matching that of many higher priced products, for executive privacy in highly sensitive areas. LOGIKA 6000 ensures an ECONOMICAL and FLEXIBLE solution for a wide range of situations. The extensive options provide the building owner with an advanced means of enhancing working environments for improved efficiency, safety and aesthetic appeal.

The system comprises a universal head section that be installed across solid partitions or as a stand alone detail for use across the head of door and glazing frames. 2 further primary components form standard GLAZING and DOOR posts and sills and transoms in any combination of glazing/door elevation. Two further primary profiles offer a shadow detail to head, adjacent solid elevations and at abutments. A further primary profile provides a low profile sill detail to double glazing to match the Logika 5000 “frameless” glazing.

The secondary sections offer a range of options to provide single offset or double glazing in Framed, Ghost post or Mullion Free options. LOGIKA 6000 provides a range of “frameless” glazing components where layouts demand a combination of solid, door and “frameless” glazing elevations.

* Full relocation (i.e. 100% reuse is only achievable where the existing characteristics of the proposed location match those of the original location i.e. floor to ceiling heights. The highest levels of reusability can be only achieved when recessed head and base options are incorporated.

1.1 MATERIALS & FINISHES

The main elements of LOGIKA 6000 are formed from non-combustible or self extinguishing materials.

1.2 VISIBLE FRAMEWORK - Aluminium:

A. MATERIAL:

Extruded from Aluminium grade 9TF to BS1474 under a BS5750 approved process.

B. ALUMINIUM STANDARD FINISH - POWDER COATINGS:

Powder coated, 60-90 microns conforming to BS6496, 6497 and AWA specifications. All coating is applied by an approved applicator operating under a BS5750 certified process. The coating process is guaranteed for 15 years against deterioration of colour, gloss level and adhesion failure within normal office environments. Any cleaning materials should be checked for any adverse effect on colour and surface qualities prior to use. All colours in the BS4800 and RAL - F3 ranges are generally available, however as manufacturers regularly update the range offered. Please check the availability of the colour you require with our sales office.

C. STANDARD GLOSS LEVELS:

MATT/SATIN (semi gloss) min. gloss level 30% ± 5% @ 1 metre. @ 60°.

1.3 GASKETS and INSERT TRIMS

LOGIKA 6000 glazing gaskets and seals are extruded in TPE materials in Black. Other colours and “clear” are available to special order and subject to minimum order quantities.

1.4 INTERNAL STEEL FRAMING

All internal steel framing of the **LOGIKA 6000** system is formed using cold rolled mild steel which has been treated with either HDG-Z2 galvanising and zinc plated to BS2989 or is formed from "Zintech" zinc impregnated mild steel. All framing is thus fully protected against corrosion.

2.0 SOLID PARTITION ELEMENTS

2.1 Logika 6000 framing will cloak the following stud/track and board combinations:

43mm stud/45mm track with 1 layer 12.5mm +1 layer 15mm Gypsum to each face

48mm stud/50mm track with 2 layers of 12.5mm Gypsum board to each face.

50mm stud/52mm track with 2 layers of 12.5mm Gypsum board to each face

70mm stud/72mm track with 1 layer or 12.5mm Gypsum to each face

2.2 Logika 6000 framing can provide a shadow interface to the following stud/track and board combinations:

43mm stud/45mm track with 1 layer 12.5mm +1 layer 15mm Gypsum to each face

43mm stud/45mm track with 2 layer 15mm Gypsum to each face

48mm stud/50mm track with 2 layers of 12.5mm Gypsum board to each face.

50mm stud/52mm track with 2 layers of 12.5mm Gypsum board to each face

70mm stud/72mm track with 2 layers or 12.5mm Gypsum to each face

2.3 SOLID ELEVATIONS - Facing materials:

LOGIKA 6000 in its standard form can accept any proprietary building board in the thickness range (including decoration) of 12.5 - 15mm. It is also possible to accommodate panel thickness in the range 10mm to 19mm by the use of **specially produced internal framework**. In its standard form **LOGIKA 6000** utilises Standard Gypsum panels:

2.4 SOLID ELEVATION - PERFORMANCE OPTIONS:

Solid offered in the following configurations which may be further enhanced to provide alternative acoustic, fire and trim details as listed below. Where an internal quilt is specified this utilises a 45Kg/cu.m x 30mm mineral fibre slab and is generally recommended in all installations where a high Acoustic performance is required. The slab can also be supplied encapsulated on request. All fire rated installations **must** incorporate a quilt where shown. It is important to ensure that fire rated partitions are fixed to existing structures that have at least the same, or a higher, fire rating than is required to meet with the local building control requirements. The fixing of a fire rated partition to a non-fire rated structure will completely negate the performance of the partition system and CANNOT be recommended.

2.5 SOLID ELEVATION - PERFORMANCE TABLE 1:

Thickness excl decoration	FIRE minutes	ACOUSTIC	STUD / TRACK	Frame Type	Gypsum FACINGS	Duty	Max ht.
100mm	30	42dB Rw	70/72	Cloaking /shadow	15mm Std to each face	Medium	3800
100mm	60	43dB Rw	70/72	Cloaking /shadow	15mm FR to each face	Heavy	3800
100mm	60	49dB Rw*	43/45	Cloaking/shadow	12.5mm +15mm Std to each face	Severe	3000
100mm	60	49dB Rw	48/50	Cloaking/shadow	2x12.5mm Std to each face	Severe	3000
100mm	90	49dB Rw	48/50	Cloaking/shadow	2x12.5mm FR to each face	Severe	3400
105mm	60	52dB Rw*	43/45	Shadow only	15mm double layer to each face	Severe	3700
110mm	60	49dB Rw	48/50	Shadow only	15mm double layer to each face	Severe	3700
122mm	60	50dB Rw	70/72	Shadow only	12.5mm double layer to each face	Severe	4000
127mm	60	54dB Rw*	70/72	Shadow only	12.5mm + 15mm layer to each face	Severe	4000

Panel joints MUST be staggered across opposite faces to satisfy the insulation criteria of the fire performance.

FR=Fibre reinforced gypsum (i.e. fireline) STD = Standard grade gypsum. * = Derived form Marshall Day Acoustics Software

2.6 Other Building Boards

Where chipboard, MDF, Cement particle board or other non-gypsum panel is specified the finish may be a laminate such as "Formica". All such panels should incorporate a balancer as recommended by the panel manufacturer. **LOGIKA 6000** can utilise any panel which has a bevel edge or square edge detail. For bevel edge panels formed from cement particle board the panel edge should be machined with a groove to accept the concealed board edge clips L700. The **LOGIKA 6000** concealed clips will work directly in non-cement boards such as MDF or chipboard. Square edge panels may be fixed using the L121 or L122 concealed fix cover trims. Where the board face uses a laminate finish such as "Formica" the material will conform to BS3794 class VGF for class "O" applications and class VGS for other applications.

2.7 SOLID ELEVATIONS - DIMENSIONS

In all configurations **LOGIKA 6000** has an overall frame width of 114mm with a panel face to panel face dimension of 100-102mm for Cloaked framing options. For thicker wall types a shadow interface channel is available and can be used for wall thicknesses up to 127mm. For thicker wall sizes see drawings for possible details.

3.0 GLAZED ELEVATIONS

3.1 General description

The **LOGIKA 6000** is a “framed” FLUSH GLAZING that accepts a range of clip in secondary sections to retain 6.0 - 12mm glass in single offset, 10-12mm single centre glazed and 6.0 – 12.8mm glass in double glazed configurations. The maximum area of glass is dictated by BS 6262 and BS6206 regarding glass types. The system is designed to accept steel liners to provide a fire performance that may be upgraded retrospectively.

UNDER CURRENT STANDARDS ALL METAL FRAMED GLAZING SYSTEMS SHOULD ELIMINATE GLASS TO METAL CONTACT and provide adequate EDGE COVER and BACK CLEARANCE. Many partition systems do not fully comply with these standards see below:

EDGE COVER Requirements of BS6262 from Table 13 for metal/plastics framing for 6mm glass = 6mm. Many systems only provide **3-5mm** whereas **LOGIKA 6000 provides 6mm**

BACK CLEARANCE Requirements of BS6262 clause 7.1.2© = 2mm. Many systems provide no back seal and hence the back clearance is zero. **LOGIKA 6000 provides 2mm back clearance**

Clearly systems with reduced edge cover or back clearance are more susceptible to variations in the glass and can compromise safety under load conditions (i.e. soft body impact).

LOGIKA 6000 GLAZING FRAMES COMPLY FULLY WITH THESE REQUIREMENTS.

3.2 SUMMARY OF PERFORMANCE – GLAZED ELEVATIONS – TABLE 2

The **LOGIKA 6000** glazing system offers the following options that may be upgraded at ANY time during installation. Upgrades utilise ALL existing visible framework and may require alternative glass i.e. for upgrades to fire rated glass.

REF	GLASS	AIR SPACE	GLASS	FIRE	Vertical glass joint	TYPE	Max height/width	ACOUSTIC RATING
SG06	6.0T	NA	NA	0	Mullion	Framed Sgl	3100 x 1500	32dB Rw
SG6P	6P	NA	NA	60	Mullion	Framed Sgl	60 minute = 2587x1100 to 3050x900	32dB Rw
SG6L	6.4L	NA	NA	0	Mullion	Framed Sgl	2500 x 920	33dB Rw
SG10L	10.8L	NA	NA	0	Mullion	Framed Sgl	3600 x 1500	35dB Rw
SG10L(2e)	10.8L	NA	NA	0	Mullion	2 edge "frameless"	2250 x 900	35dB Rw
SG10T	10.0T	NA	NA	0	4m m silicon	2 edge "frameless"	2300 x 900	32dB Rw
SG10P	10P	NA	NA	60	4mm fire seal	2 edge "frameless"	2587x1100 to 3050x900	32dB Rw
SG12L	12.8L	NA	NA	0	4mm silicon	2 edge "frameless"	3200x1500	36dB Rw
SG12T	12.0T	NA	NA	0	4mm silicon	2 edge "frameless"	3270 x 1500	35dB Rw
SG12P	12P	NA	NA	30	4mm fire seal	2 edge "frameless"	3000x1500	35dB Rw
SG12A	12.8A	NA	NA	0	4mm silicon	2 edge "frameless"	3200x1500	39dB Rw
DG6L/7A	6.4L	76	7.4A	0	Mullion /Ghost	Framed Dbl	3000x1000	45dB Rw
DG6L/6T	6.4L	76	6.0T	0	Mull ion/Ghost	Framed Dbl	3000x1100	43dB Rw
DG6L8T	6.4L	76	8.0T	0	Mullion/Ghost	Framed Dbl	3000x1500	44dB Rw
DGF6P6L	6.0P	76	6.0L	60	Mullion Only	Framed Dbl	2587x1100 to 3050x900	43dB Rw
DGF6P/6T	6.0P	76	6.0T	60	Mullion Only	Framed Dbl	2587x1100 to 3050x 900	42dB Rw
DG6T/10L	6T	74	10L	0	Mullion Only	Framed Dbl	3600x1500	46dB Rw
DG8T/10L	8T	74	10L	0	Mullion Only	Framed Dbl	3600x1500	46dB Rw
DG6T/12L	6T	74	12L	0	Mullion/Ghost	Framed Dbl	3600/3000x1500	47dB Rw
DG6L/12L	6L	74	12L	0	Mullion/Ghost	Framed D bl	3600/3000x1500	47dB Rw
DG8T/12L	8T	73	12L	0	Mullion/Ghost	Framed Dbl	3600/3000x1500	46dB Rw
DG12T/12L	12T	71	12L	0	Dry Joint	"Fram eless" Dbl	3000x1500	46dB Rw

Above acoustic values are from test results, technical literature provided by Saint Gobain & Acoustic prediction software
Fire results are from Tests & assessments carried out at Warrington Fire Research and Certifire document CF291
Height calculations have been determined from BS63999 Table 4 loadings for Occupancy category B and E (v) using Mechinfo software provided by JC Glass Consultants for Partition loads only. (As used by British Airports Authority)
For Barriers protecting a change in floor level, please consult our technical department for recommendations.
In the previous table the following abbreviations have been used for glass types:

GLASS	TYPE	GLASS	TYPE
6T	6MM TOUGHENED GLASS	10T	10mm TOUGHENED GLASS
6L	6.4mm LAMINATE GLASS	10L	10.8mm LAMINATE GLASS
6P	6mm PYRAN GLASS	10P	10mm PYRAN GLASS
8L	8.8mm LAMINATE GLASS	12T	12mm TOUGHENED GLASS
8T	8mm TOUGHENDED GLASS	12L	12.8mm LAMINATE GLASS
8P	8mm PYRAN	12P	12mm PYRAN GLASS
7A	7.5mm ACOUSTIC LAMINATE	13A	13.5mm Acoustic Laminate

3.3 Maximum Acoustic performance

The maximum achievable sound rating of a partition wall will depend upon the ratio of glazing area to solid partition area within the run. For example; a 48dB Rw solid partition incorporating 50% glazing comprising of 42dB Rw glazing the overall rating would be 45dB Rw. All sound performances are based upon laboratory test data and will be affected by existing site

conditions, and the presence of door openings. Door frames can be upgraded to 36dB (Rw) by incorporating automatic seals and a LOGIKA Acoustic door panel with additional seals.

3.4 UNIVERSAL FRAMING SYSTEM FOR ACOUSTIC & FIRE PERFORMANCES.

The **LOGIKA 6000** glazing system is universal to all solid acoustic and fire options. A KEY FEATURE OF THE SYSTEM IS THE COMMON 100mm component FACE TO FACE DIMENSION. This allows a common set of glazing and door frame profiles to be utilised within any of the available solid performance levels. Full or part glazed options are easily achieved in either double or single glazing configurations. We also offer a shadow post option for a "Frameless" interface to Taped & Jointed flush walls.

3.5 INTEGRAL BLINDS

LOGIKA 6000 can accommodate any proprietary horizontal blind system.

In DOUBLE GLAZING the maximum blade width is 50mm.

LOGIKA 3000 can accommodate any proprietary vertical/horizontal blind system in SINGLE GLAZING with a maximum blade width is 70mm.

3.6 MULTI-LEVEL SINGLE BLIND CONTROL

All **LOGIKA 6000** aluminium sections will accept a rotary remote tilt control which may include up to 3 blind sets operating in any vertical module, operated by a single control. **MAXIMUM width 3 X 1000mm using Logika blinds & Blind controls**

3.7 COLOUR CO-ORDINATED BLIND CONTROLS:

All blind controls may be colour processed at the same time as the main aluminium framework for colour matching. The knob controls must be ordered in advance of the actual blinds so that they can be coated with the framework.

4.0 DOOR ELEVATIONS:

4.1 DOORS for LOGIKA 6000 Framing.

A range of doors are available to order and have been fire tested with the **LOGIKA 6000** door frame, hinge and lock set. All standard doors are of solid core construction and provide 30dB Rw (tested) acoustic performance. A **LOGIKA 6000** Acoustic door is available to order that will provide 36dB Rw (assessed) with the Logika ACOUSTIC SEAL upgrade set.

4.2 NON FIRE RATED

The **LOGIKA 6000** standard frame and door set incorporates a solid core door panel, LHG505 stainless steel ball race hinges, a steel lock box and a 5 lever Union lock. The lockbox can be colour matched to the aluminium framework to provide a uniform appearance or they can be supplied in stainless finish.

The **LOGIKA** LHG505 hinges are rated at CLASS 13 (EN1935 2002).

4.3 FIRE DOOR

The LOGIKA 6000 door frame can be upgraded for fire performance by the addition of intumescent seals, fire board liners and a steel channels within the door frame and has been tested up to 37minute fire performance under BS476 part 22 using a 45mm Logika solid core door panel construction to provide 30minutes integrity only fire rating.

4.4 DOORS - HANDLING, STORAGE & PROTECTION:

Ensure panels are protected from impact damage at all times.

Protect panels from prolonged exposure to water, oil, grease and other liquids.

Store away from direct heat sources and on a level surface with suitable supports.

4.5 Flush double glazed

New to **LOGIKA 6000** is the flush double glazed door leaf. This utilises a "hidden" internal frame that is concealed behind a painted margin on the inner face of the glass that faces the both faces of the door leaf.

Unique to Logika is the protective sill and edge seal carrier that prevent accidental impacts of the glass edge and maximises the area of visible glass. The leaf can accommodate automatic drop seals, magnetic meeting stile seals and (when used with a Logika 6000 door frame) can accept a concealed closer and electric solenoid bolt for access control. The standard frame and door set incorporates LHG505 stainless steel ball race hinges, a steel lock box, narrow stile cylinder lock and Stainless Steel "anti finger trap" levers. The lockbox can be colour matched to the aluminium framework to provide a uniform appearance or they can be supplied in stainless finish

4.6 Alternative door Types

LOGIKA 6000 will accept any door panel type providing the limits given in section 5.3 are not exceeded, where doors are supplied from alternative sources the fire performance of the combined door and an ALUMINIUM frame must be confirmed with the supplier.

5.0 HARDWARE and IRONMONGERY

5.1 Fire Rated ironmongery

Attention should be paid to the types of lock and hinge specified for use in fire doors. In certain cases the incorrect choice of furniture/ironmongery can seriously reduce the effective fire performance. All **LOGIKA 6000** ironmongery has been tested to BS476 part 22 and has achieved 32 and 50 minute ratings.

5.2 STOCK IRONMONGERY & HARWARE:

Stock ironmongery: The **LOGIKA** range of Satin & Polished Stainless ironmongery is held in stock. Door furniture from any manufacturer can be incorporated in **LOGIKA 6000** providing it does not impair fire performance where applicable.

5.3 LOGIKA 6000 – DOOR HINGING RECOMMENDATIONS:

Doors require the following hinges for correct operation:

Doors up to 80Kg use Logika LK505 Stainless Steel Class 13 (EN1935 2002) Ball race hinges as detailed below:

Door panel up to 2650x 900	-	3 hinges per door leaf - EURO SPACING
Door panel up to 2800 x 950	-	4 hinges per door leaf- EURO SPACING
Max weight: 80Kg/ leaf	-	NO DOOR CLOSER
Max weight: 65Kg/leaf	-	WITH DOOR CLOSER

NOTE: FOR DDA COMPIANCE MINIMUM WIDTH IS GENERALLY 960mm

5.4 FULL HEIGHT DOORS FITTED WITHIN FULL HEIGHT GLAZING

Avoid full height door panels being hinged from an adjacent full height glazing mullion. In general this detail can only be accommodated where a transom is included in the adjacent glazing or (where the door is standard height) includes a fixed over-panel. In all cases the mullions should be bonded to the adjacent glass.

Full ht. doors in full height single offset glazing should be designed with either a transom or fixed overpanel to prevent excess rotational movement in the hinge and strike posts due to the asymmetrical glass configuration.

6.0 LOGIKA 6000/500 "FRAMELESS" SILICON JOINTED GLAZING COMPONENTS

6.1 Slimline Components

LOGIKA 6000 provides a range of SLIMLINE framing components that may be incorporated alongside Logika 5000 glazing through a number of clip-in adapters that allow for the incorporation of 10 and 12mm glass. The range includes components for glass doors in "frameless" and "framed" (for higher acoustic performance) options. The system can be used with the full range of GLASS PATCH hardware, and can accommodate "MANET" ™ sliding doors combinations.Logika hold wide range of DORMA ™ architectural ironmongery to compliment the "frameless" glazing system. **FACETTED & CURVED**

6.2 CONFIGURATIONS

The Logika **6000** can be PRE- FORMED into curved and facetted configurations. These components are factory formed off-site. These options can accommodate most of the Single glazed configurations.

Double glazing uses "Dry jointed" 12mm glass to both faces.

a) **FACETTED**

This utilises a 30mm deep universal SLIMLINE head channel and 30mm base section. Each component is pre-welded into matching facetted sets according to layout requirements. Pre-welding eliminates the possibility of mitres opening up during use as can be the case with "site mitred" systems.

b) **CURVED**

This utilises the SLIMLINE head channel and 30mm base section. Each component is pre-CURVED into matching sets according to layout requirements.

6.3 Dry Joint Components

The "dry joint" components are extruded from an extremely clear high impact strength polymer that has been selected for its high UV resistance and physical strength. This compares with more traditional systems that utilise "crystal" PVC which suffers from "UV" enbrittlement and discolouring under UV exposure. The high levels of lighting in modern offices produces high level of UV emissions and these affect "crystal" PVC in a similar way as sunlight.

6.4 LOGIKA 6000/5000 "DRY-JOINT" DOUBLE GLAZING COMPONENTS

Double Glazed GHOST POST system.

The LOGIKA range provides a means to double glaze the Logika 6000 system using a "clear" ghost post that eliminates the standard aluminium mullion detail. This provides glazing run with a clear and almost flush aspect and is ideal for applications requiring a **higher acoustic performance than traditional silicon glazed designs** by using more economical 6mm/8mm and 6.4mm glass combinations.

6.5 Single glazed

The dry-joint components include a range of profiles that accept 12mm* safety glass. This provides a simple alternative to traditional Silicon jointed glazing, where speed of installation (due to the lack of "curing" times) and total demountability are of prime concern. * At present Dry Joint components are NOT available for 10mm safety glass.

6.6 MAXIMUM HEIGHTS – "FRAMELESS" GLAZING:

a) **Single glazed "Frameless" 10 and 12mm glass (Silicon jointed)**

Generally the maximum heights of "**frameless Silicon Jointed** "glazing systems are determined by the glass used in such systems. The other governing factor is to determine which Standard the screen is to comply with. For example the loads under BS5234 Part 1 (for partitions) differ from the loads under BS6180 for "Barriers in and about Buildings" and in some circumstances a glazed partition may fall within the criteria of BS6180. An example of this a glazed screen that indicates a "route through a building".

Under **BS 5234** (Office Partitions max deflection = height/65 Max 50mm) loading conditions:

The maximum height for 10mm safety glass will be 2400mm

The maximum height for 12mm safety glass will be 3270mm

Under BS 6180 (Barrier max deflection = height/65 Max 25mm)

With a Design Load based on category B/E (v) 0.74kN/m line load – 1kN/sq.m UDL - 500N point load)

The maximum height for 10mm safety glass will be 2100mm

The maximum height for 12mm safety glass will be 2500mm

a) **Single glazed "Frameless" 12mm glass ("Spectra ®" Dry joint)**

The maximum heights of "frameless Dry Joint" glazing systems are determined by the glass and recommendations of the glass manufacturers themselves. The other governing factor is the BS5234 Part 1 Standard. From the glass manufacturer's recommendations, under BS 5234 loading conditions:

The maximum height for 12mm safety glass will be 3050mm FFL to FCL

NOTE: Dry joint is currently not available for 10mm glass.

b) **Double glazed framed (Top & Bottom edges with "Spectra ®" Ghost Post to BS5234**

The following glass thicknesses can be used

6mm Toughened	-	Max height	= 2.9m
6.4mm Laminated	-	Max height	= 2.9m
8mm Toughened	-	Max area	= 3.0m

Maximum heights are base on the maximum 1000mm centres for the "Ghost post".

Where 8mm + 6mm is used up to 2700 then the spacing may be increased to 1500mm ctrs.

"Spectra" is registered trade name for Eastman Chemical Company and refers to the material used to form the Dry-joint sections. This material is a Polymer developed for applications such as riot shields and safety glass, where its unique properties provide a range of benefits compared to traditional Crystal PVC designs. Its characteristics include:

I) Shatter-proof under heavy impacts

II) Class 1 (y) fire performance

III) High flexural strength

IV) Almost transparent

6.7 Frameless Glazing Door frame options.

Logika 6000 can incorporate "Frameless" glass doors or where additional acoustic performance is required the glass doors can be provided with a Logika 6000 aluminium frame. For "Frameless options the glass doors will be held on stainless steel top and bottom pivots and can be fitted with floor-springs. The "Framed" option cannot normally be fitted with a floor spring. The same frame can also be utilised for the incorporation of Hardwood Veneered timber door sets where required.

DDA Legislation and Frameless Doors

Under current legislation fully "frameless" glass doors may not comply with the requirements of the "Design of Buildings and their approaches to meet the needs of disabled people Code of Practice" (known as the DDA standards). To comply, all doors should have contrasting perimeter finish to make the door more visible within the surrounding glass.

7.0 AVERAGE PARTITION WEIGHTS: - 2.7 mtr. High

SOLID	-	15mm Gypsum faced	78.3 Kg/lin.m.
SOLID	-	Double 12mm Gypsum faced	118 Kg/lin.m.
SOLID	-	add ROCKWOOL	0.19 Kg/lin.m.
DOOR	-	STD height (2040mm)	40.0 Kg/lin.m.
DOOR	-	full height	52.9 Kg/lin.m.
GLAZED	-	full ht. Single – 6mm glass	34.0 Kg/lin.m.
GLAZED	-	full ht Single 10mm glass	57.0 Kg/lin.m.
GLAZED	-	full ht Single 12mm glass	68.0 Kg/lin.m.
GLAZED	-	full ht. Double Glazed	75.6 Kg/lin.m. 6mm + 6.4lam.

8.0 MAINTENANCE:

8.1 CLEANING:

A stock of cleaning materials is available from the manufacturer and is supplied with ALL initial installations.

CLEANING AGENTS AND USES:

I) Amberclens:

This is an anti-static cleaner which is recommended for all aluminium, PVC, PETG, door panels and vinyl finishes. Follow Instructions for use printed on the aerosol can.

II) Ambersil Glass cleaner:

This is a smear free glass cleaner.

8.2 REPAIRS:

a. SOLID PANELS:

In general, standard plasterboard repairing techniques may be employed. However, it is usually simpler to replace damaged panels using decoration kept in store from the original installation.

Window facing decorated panels can "fade" or discolour due to UV exposure and it may therefore be advisable to consider replacement of all panels in a particular run as a single new panel may well not match the others in the run. (A typical cross run between offices only uses 3 boards)

b. ALUMINIUM FRAMEWORK:

I) Surface scuffs - Amberclens

II) Shallow scratches - Use an aluminium abrasive block to rub down and use touch up paint.

III) Deep scratches - Replacement from mfr.

c. DOOR PANELS:

I) If damage is slight then rub down and re-polish.

II) surface marks i.e.: shoe scuffs use Amberclens

III) Deep scratches - use proprietary filler and matching stain, rub down and re-polish. If damage is substantial consider replacement.

d. PVC EXTRUSIONS:

I) Surface marks/scuffs - use Amberclens

II) Minor surface scratches (non-coated), use fine abrasive cleaner e.g. Liquid Gumption or similar. When surface has been smoothed give a final polish with Amberclens.

III) Major scratches - replace component.

IV) Painted PVC profiles may be rubbed down to remove minor scratches and then touched in using a fine brush and small quantity of air drying vinyl paint. If the installation is more than 6 months old, the paint will generally have to be made to order as the original paint has a short shelf life. Paint is available from the manufacturer and a small charge is made for this service.

e. PETG EXTRUSIONS:

I) Under normal use these profiles are impact resistant. However should accidental damage occur the profile should be replaced as any attempt to repair will be visible on the transparent profiles.

8.3 ROUTINE MAINTENANCE:

Apart from cleaning on a regular basis both **LOGIKA 3000, LOGIKA 6000 and LOGIKA 5000** require little routine maintenance.

HINGES & LOCKS

The Logika LHG505 Ball race hinge is self lubricating and requires no additional lubrication.

If lubricant seeps from the knuckle it may be a sign of wear and replacement should be considered where the door is "High Traffic". Inspect locks, door closers and Hinges every 6 months. Look for any signs of wear to moving parts (usually indicated by a black residue on the bearing surfaces). And any loosening of fixing screws. A small drop of SILICON LUBRICANT (Servisol available from Logika) should be applied to latch followers and door closer arm joints. Where Logika hinges have not been used the hinge manufacturers' recommendations should be followed.

During the first two months of occupation identify "high traffic" doors (more than 100+ operations (cycles) per day and reduce the inspection interval.

Logika 5000 pivot hinges for glass doors contain a sealed ball race at the bottom pivot. Inspect the top pivot locks, door closers and Hinges every 6 months. Look for any signs of wear to moving parts (usually indicated by a black residue on the bearing surfaces). And any loosening of fixing screws. A small drop of SILICON LUBRICANT (Servisol available from Logika) should be applied to latch followers, door closer arm joints and top pivot pins. Where Logika hinges have not been used the hinge manufacturers' recommendations should be followed.

Hinge ratings are broadly based on the following assumptions:

DOOR LOCATION	ESTIMATED NUMBER OF CYCLES	
	DAILY	ANNUALLY
LARGE OFFICE BUILDING ENTRANCE	5000	1500000
LARGE OFFICE ENTRANCE	1000	300000
LARGE OFFICE CORRIDOR	450	104000
OFFICE DOOR	75	18000
STORE/TOILET DOOR	60	18000

A typical main office door operates at 700 cycles per day or 145000 annually. The maximum cycle recommendation for a for a Class 9 hinge is 200000 @120Kg.

PVC

The anti-static collected on PVC surfaces attracts dust and this can be drastically reduced by cleaning with Amberclens which applies an anti-static surface to the PVC. This should be applied every 6-10 weeks subject to ambient conditions.

8.4 REPLACEMENT COMPONENTS:

All non coated components are available ex-stock with the exception of special door panels and ironmongery.

Colour coated components are generally available within 10 working days. However for urgent requirements a 48 hour service is available for most coating. PVC coating is and air-dry finish and at least 10 working days is required if the paint is in stock at the manufacturer. If this is not the case then availability will be extended. All 48 hour services attract additional surcharges and all coating attracts a set-up charge for each colour in both Aluminium and PVC

9.0 PRODUCT REVIEW AND STANDARDS:

LOGIKA 3000, LOGIKA 5000 and LOGIKA 6000 ARE SUBJECT TO CONSTANT REVIEW IN ORDER TO IMPROVE PERFORMANCE AND QUALITY AND TO OFFER ANY COST SAVINGS THROUGH THE USE OF THE MOST RECENT MATERIAL DEVELOPMENTS. ALL DESIGN IMPROVEMENTS WILL BE COMPATIBLE WITH THE EXISTING PRODUCT TO AVOID COMPONENT DUPLICATION AND REDUNDANCY. THE ATTACHED SPECIFICATION IS A MINIMUM PERFORMANCE EXPECTATION. WE RESERVE THE RIGHT TO UPGRADE AND ALTER THIS SPECIFICATION WHILST MAINTAINING THIS MINIMUM PERFORMANCE. WE WILL ENDEAVOUR TO SUPPORT ANY SPECIAL DESIGN REQUIREMENTS PROVIDING THAT THE DESIGN CRITERIA ARE IN ACCORDANCE WITH THE LATEST REGULATIONS AND SAFETY STANDARDS. WE WILL NOT SUPPORT DESIGN REQUIREMENTS WHICH DO NOT SATISFY SAFETY STANDARDS OR DO NOT COMPLY WITH BRITISH OR EUROPEAN STANDARDS. ALL MANUFACTURING AND FINISHING PROCESSES USED IN THE **LOGIKA 3000, 5000 & 6000** SYSTEMS ARE BS5750 APPROVED.

9.1 MANUFACTURED IN THE UK BY:

LOGIKA PARTITIONS LIMITED. **e-mail : technical@logikapartions.com**

Address & telephone Numbers: **See bottom of page.**

AVAILABLE THROUGH YOUR LOCAL APPROVED CONTRACTOR:

APPENDIX 1

DETAIL DRAWINGS

LOGIKA PARTITIONS LIMITED. 7 Lime Grove Estate, Falconer Road, Haverhill, Suffolk, CB9 7XU Tel: 01440 764897 Fax: 01440703660

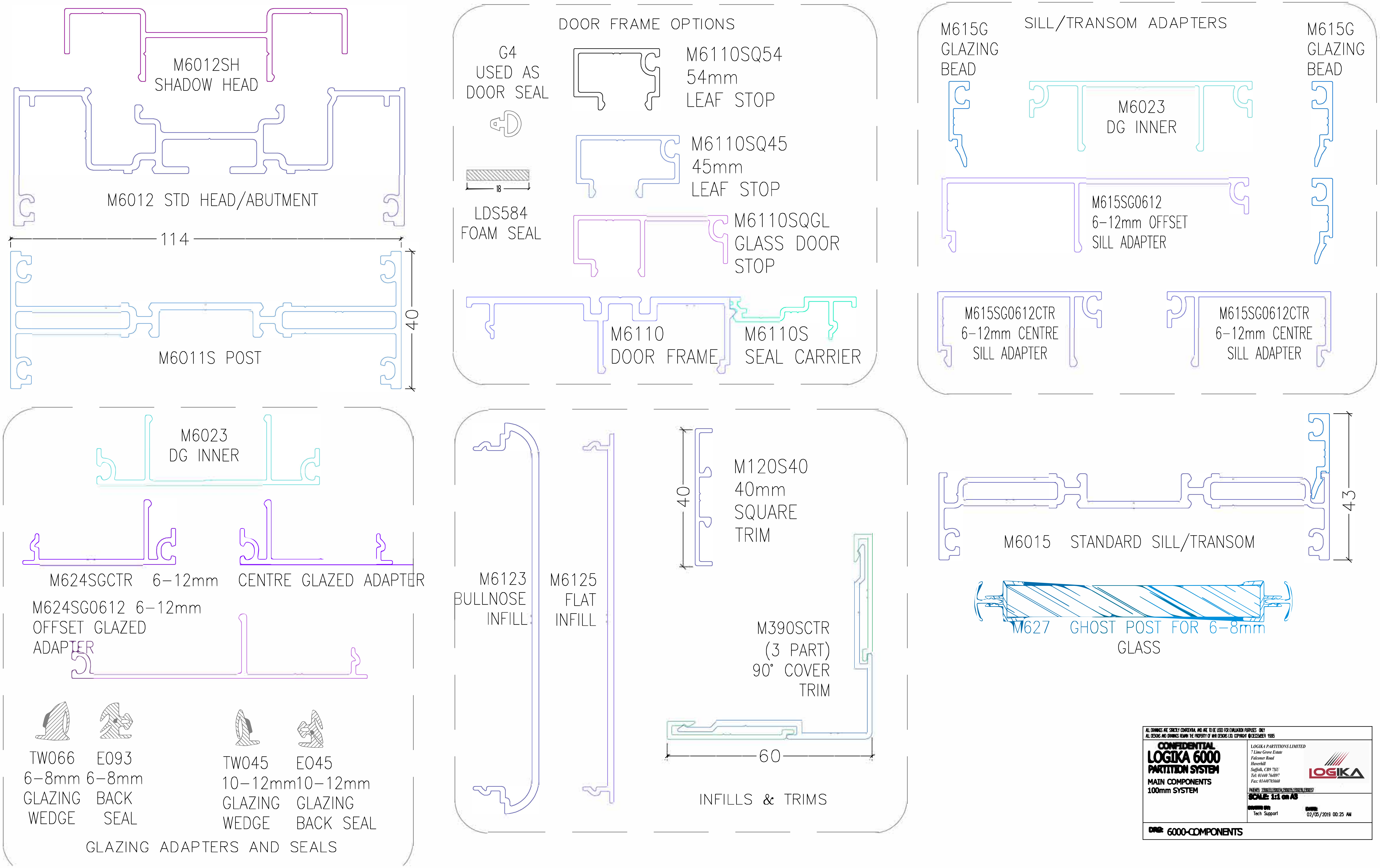
SECTION A - LOGIKA 3000

COMPONENTS:

6000	ALUMINIUM COMPONENTS, GASKETS & SETTING BLOCKS
6500	5000 SLIMLINE COMPATIBLE RANGE

ASSEMBLY DRAWINGS:

DET6100	SOLID INTERFACE OPTIONS
DET6101	Cloaked Interface Centre Single 6-8mm Glazed Standard Head & Base
DET6102	Cloaked Interface Offset Single 6-8mm Glazed Standard Head & Base
DET6103	Cloaked Interface Double 6-8mm Glazed Standard Head & Base
DET6104	Cloaked Interface GHOST POST Double 6-8mm Glazed Std Head & Base
DET6104	Cloaked Interface HORIZONTAL SECTIONS THRU'
DET6501	OFFSET SINGLE GLAZED SLIMLINE FRAMES
DET6502	CENTRE SINGLE GLAZED SLIMLINE FRAMES SHADOW HEAD
DET6503	DOUBLE GLAZED GHOST POST
DET6504	DOUBLE GLAZED DRY JOINT (MULLION FREE)



CONFIDENTIAL

LOGIKA 6000
PARTITION SYSTEM

MAIN COMPONENTS
100mm SYSTEM

LOGIKA PARTITIONS LIMITED
7 Lime Grove Estate
Falconer Road
Haverhill
Suffolk, CB9 7XU
Tel: 01440 764897
Fax: 01440703660

SCALE: 1:1 on A3

Tech Support

02/05/2019 00:25 AM

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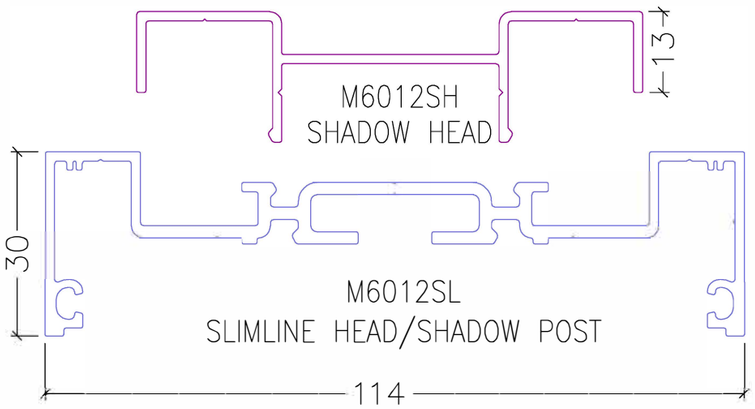

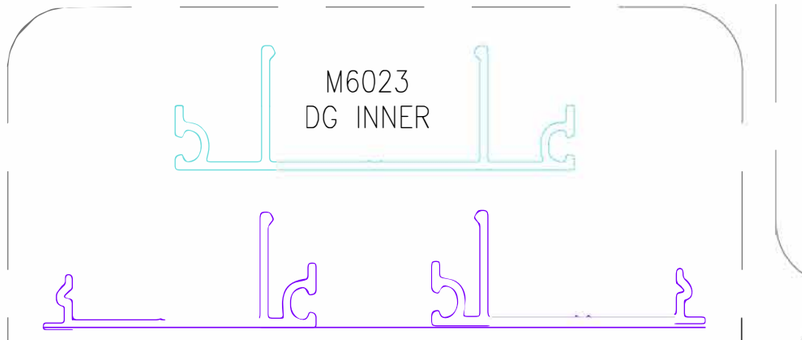

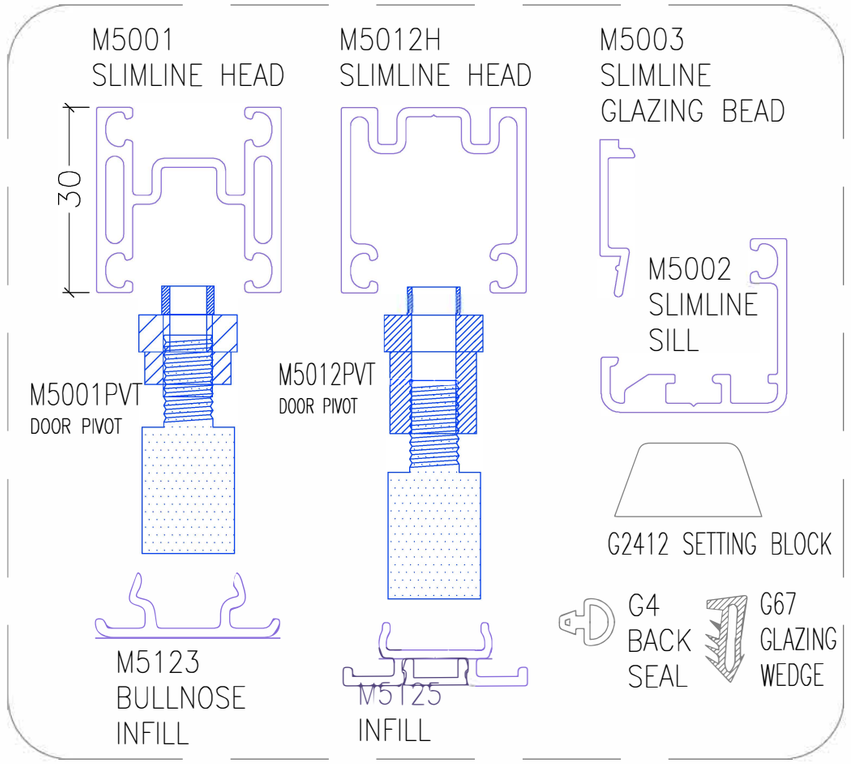

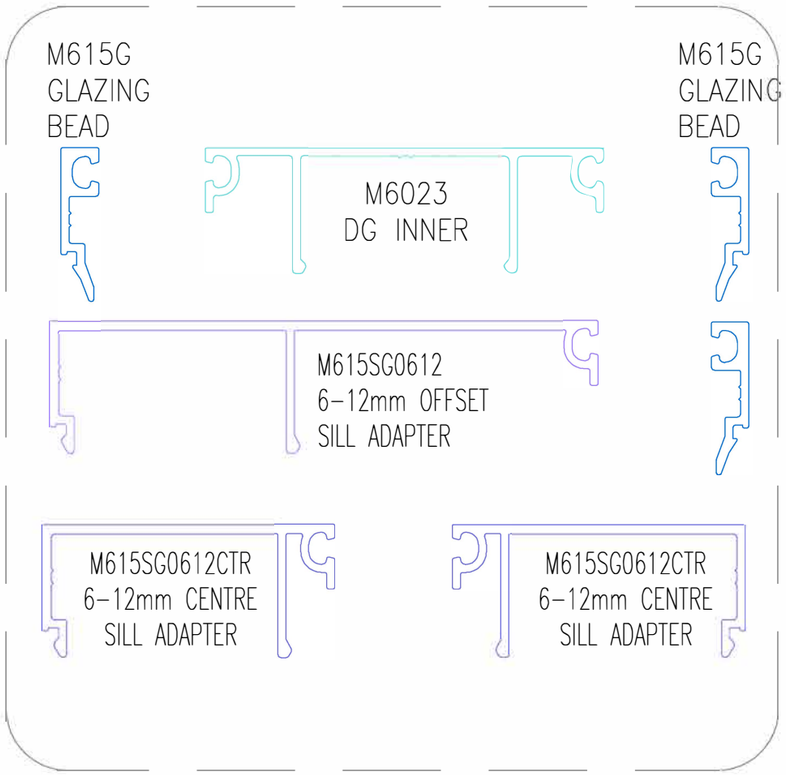

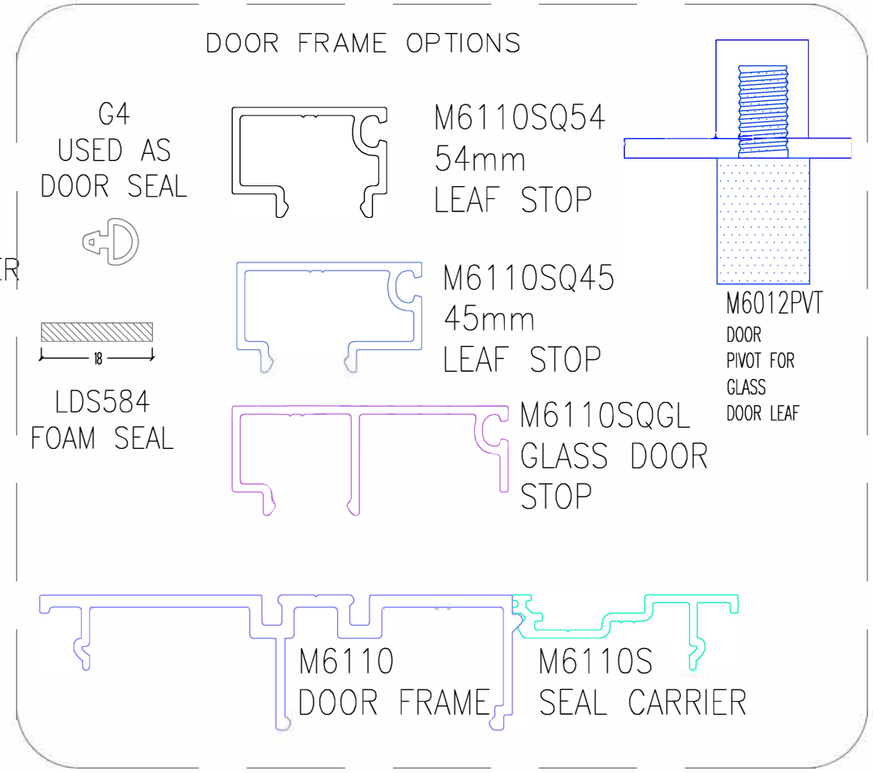

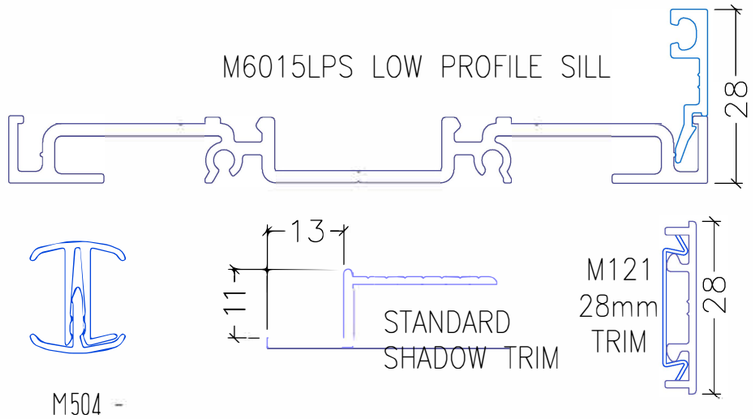

CONFIDENTIAL

LOGIKA 6000 100mm FRAMING SYSTEM

5000 COMPATIBLE COMPONENTS AND SHADOW PROFILES

LOGIKA PARTITIONS LIMITED
7 Lime Grove Estate
Falconer Road
Haverhill
Suffolk, CB9 7XU
Tel: 01440 761897
Fax: 01440 703660

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SCALE: 1:1 on A3

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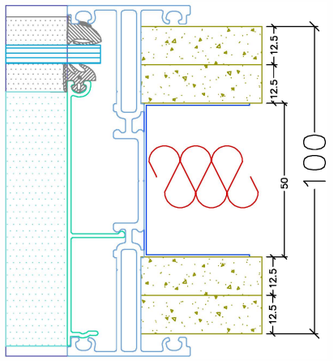
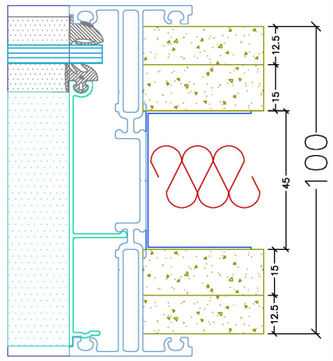
DATE: 02/05/2019 00:25 AM

DRG: 6500-COMPONENTS

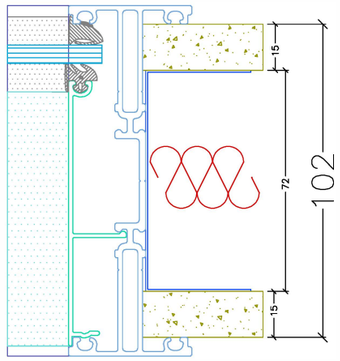
101–CLOAKING INTERFACE TO 50 TRACK/48 STUD + 2 X 12.5mm GYPSUM



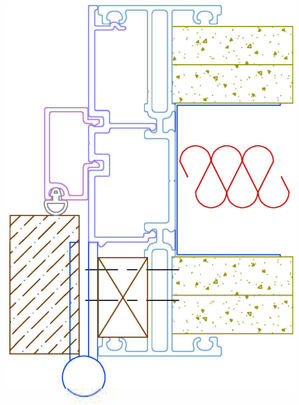
102 –CLOAKING INTERFACE TO 45 TRACK/43 STUD + 2 X (15mm+12mm) GYPSUM



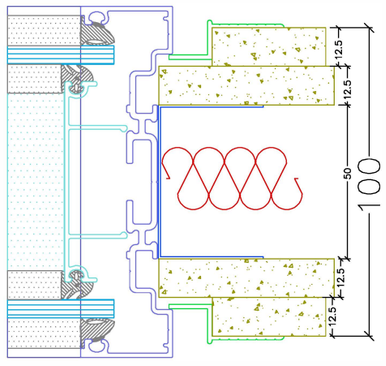
103–CLOAKING INTERFACE TO 72 TRACK/70 STUD + 1 X 15mm GYPSUM



104–CLOAKING INTERFACE TO DOOR SECTION



105–SHADOW INTERFACE TO 50 TRACK/48 STUD + 2 X 12.5mm GYPSUM



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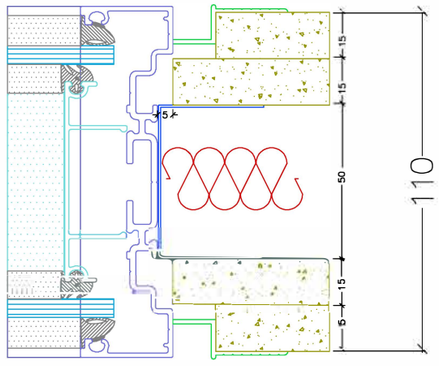
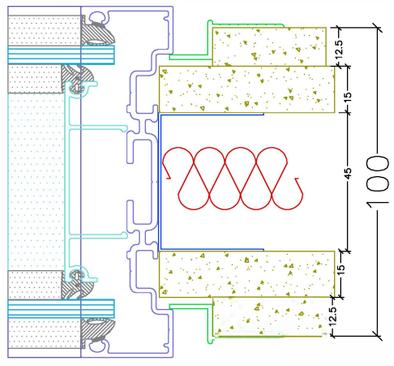
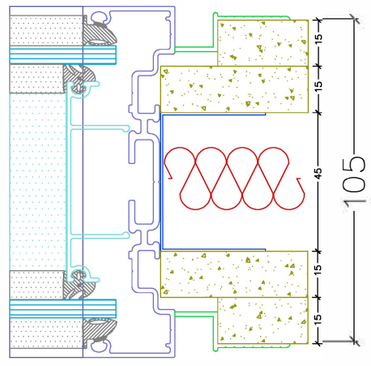


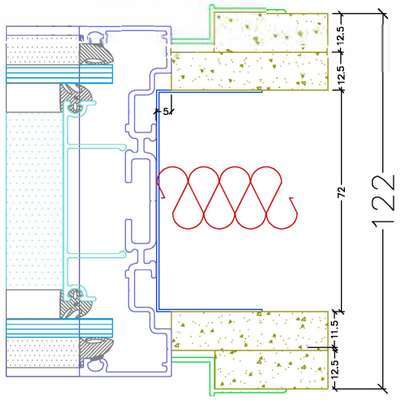
107–SHADOW INTERFACE TO 45 TRACK/43 STUD + (12.5mm+15mm) GYPSUM



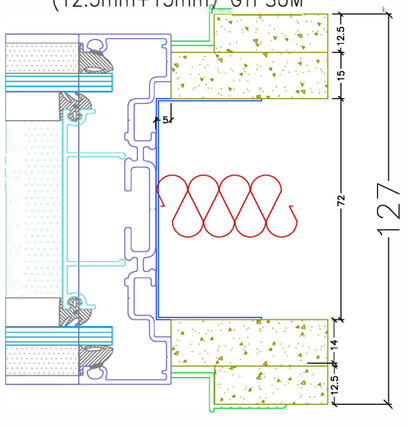
108–SHADOW INTERFACE TO 45 TRACK/43 STUD +2 x15mm GYPSUM



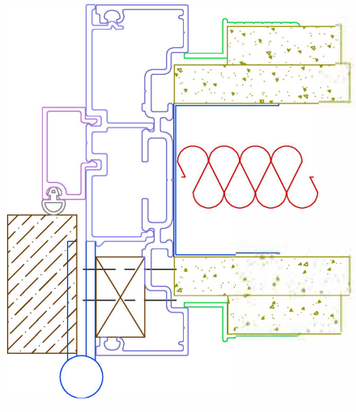
109–SHADOW INTERFACE TO 72 TRACK/70 STUD + 2 X 12.5mm GYPSUM



110–SHADOW INTERFACE TO 72 TRACK/70 STUD + 1 X (12.5mm+15mm) GYPSUM



111–SHADOW INTERFACE TO DOOR SECTION



CONFIDENTIAL

LOGIKA 6000
PARTITION SYSTEM

SOLID INTERFACE OPTIONS

LOGIKA PARTITIONS LIMITED
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Fax: 01440703660

LOGIKA

SCALE: 1:2 on A3

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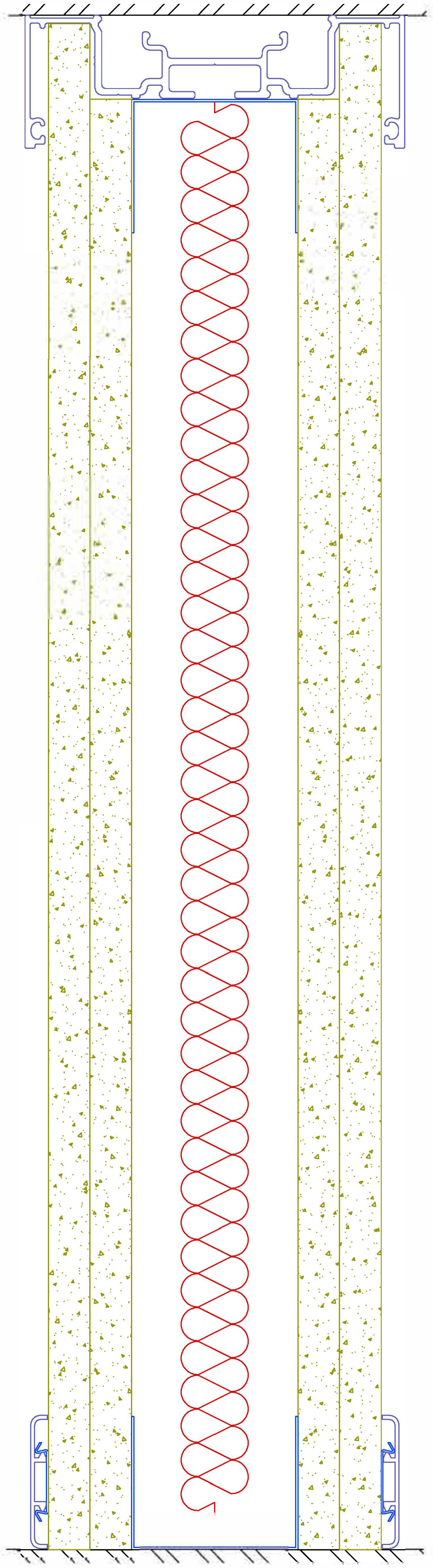
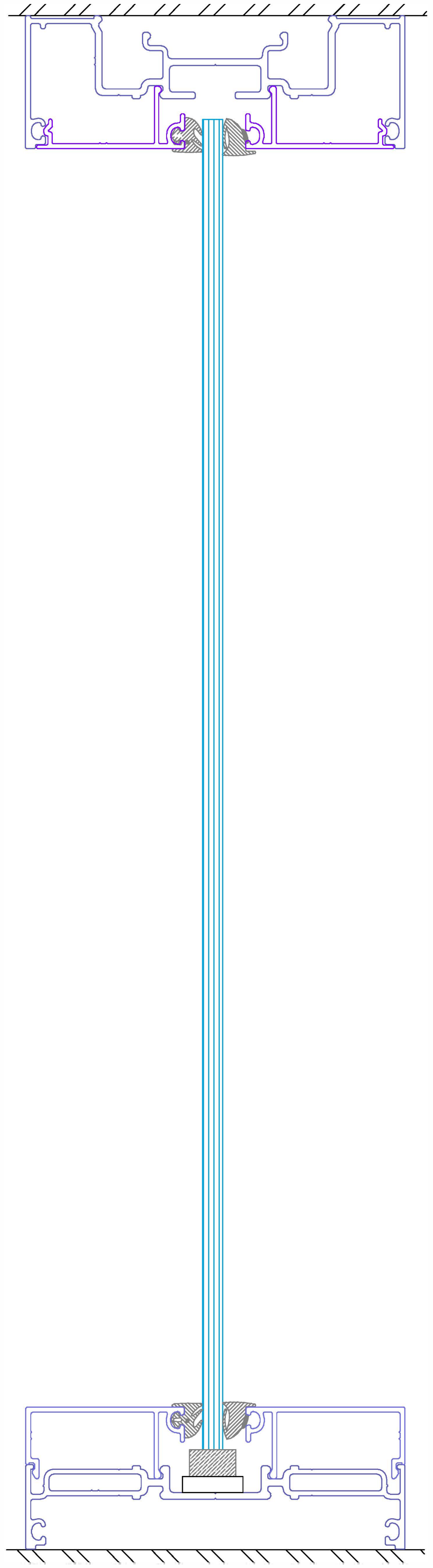
DATE: 02/05/2019 00:25 AM

DRG: **DET6100**

001-STANDARD HEAD TO SOLID

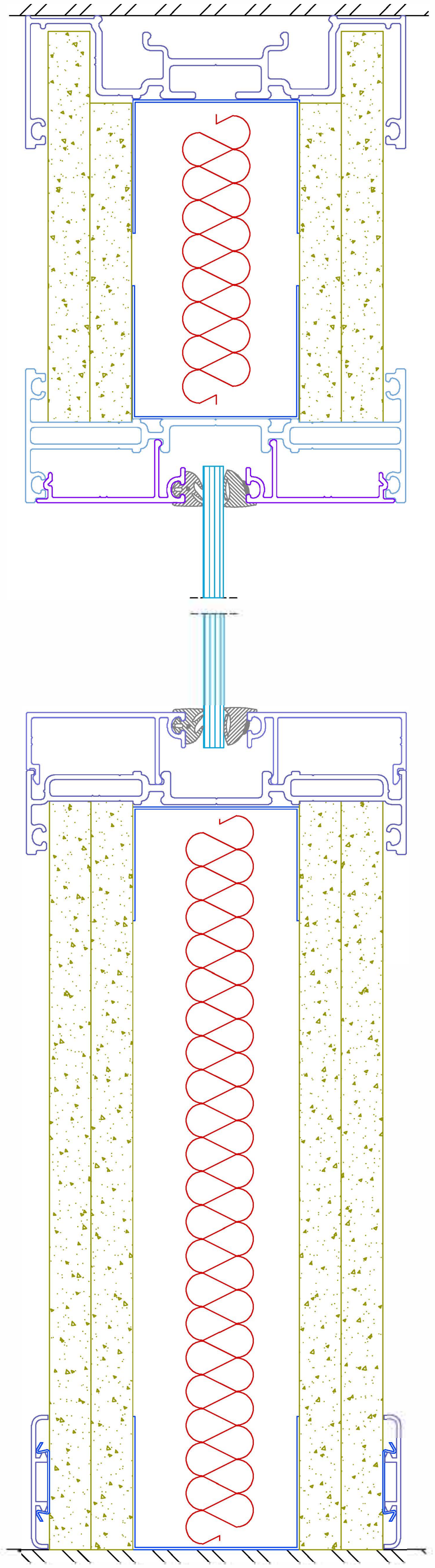


002-STANDARD SINGLE GLAZED HEAD



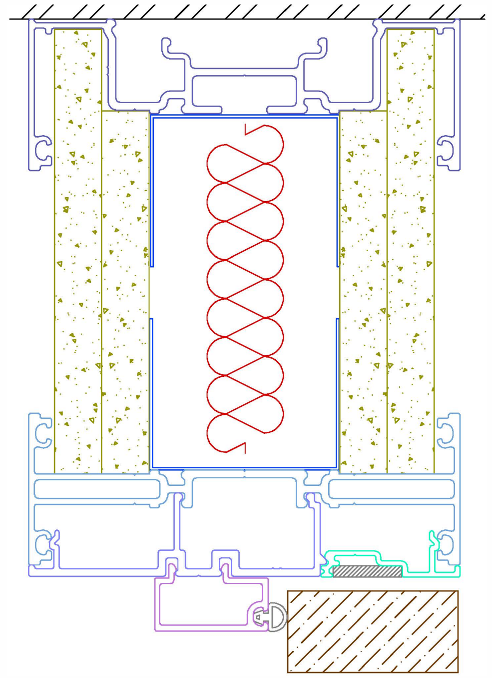
004-SINGLE GLAZED SILL

003-STANDARD GLAZED DOOR HEAD TRANSOM



005-STANDARD SINGLE GLAZED DADO RAIL ABOVE SOLID

006-STANDARD SOLID DOOR HEAD TRANSOM



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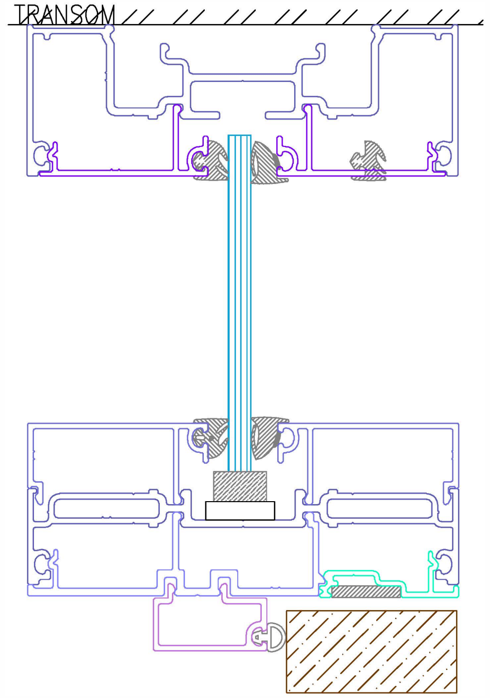
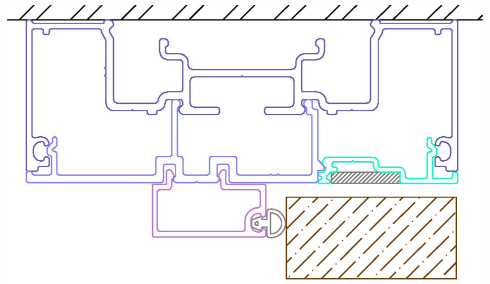


007-STANDARD FULL HT. DOOR HEAD



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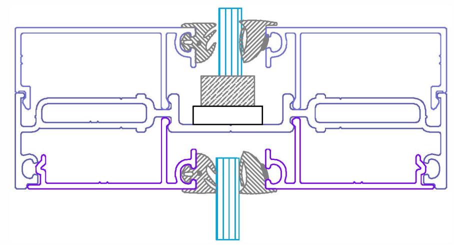

NOTES

LOGIKA 6000 ACCEPTS GLASS UP TO 13.5mm THICKNESS IN SINGLE OFFSET GLAZED CONFIGURATIONS. USING A RANGE OF GASKET THICKNESSES.

Special items to order only:l
ADAPTERS FOR GLASS UP TO 19mm THICKNESS IN CENTRE GLAZING.
DOOR STOP FOR 54mm THICKNESS DOOR LEAF.

CONFIDENTIAL
LOGIKA 6000
PARTITION SYSTEM

STANDARD HEAD WITH STANDARD BASE - CENTRE 6-8mm SINGLE GLAZED VERTICAL SECTIONS THRU

LOGIKA PARTITIONS LIMITED
7 Lime Grove Estate
Falconer Road
Haverhill
Suffolk, CB9 7XU
Tel: 01440 764897
Fax: 01440703660

PATENTS:

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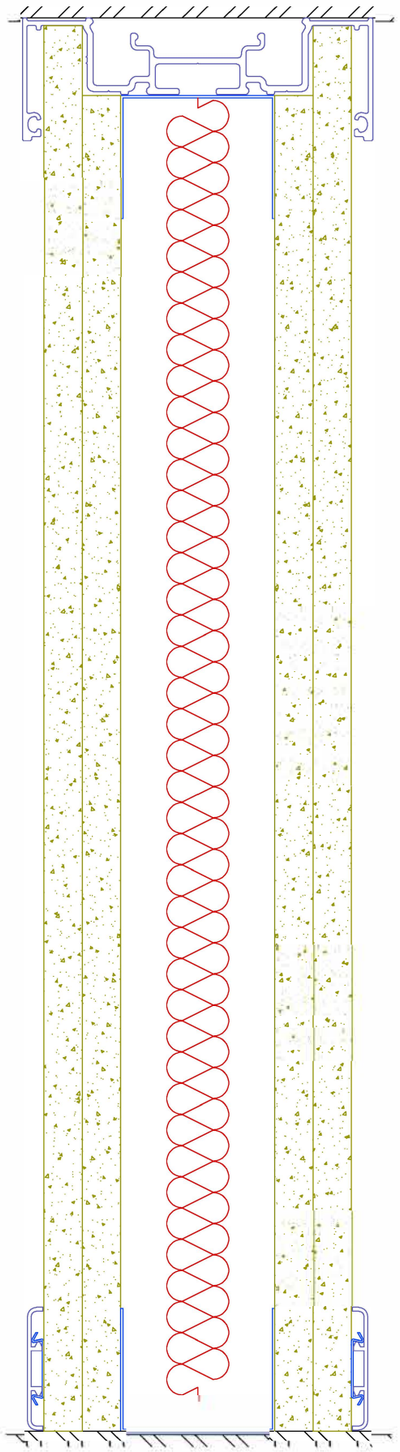
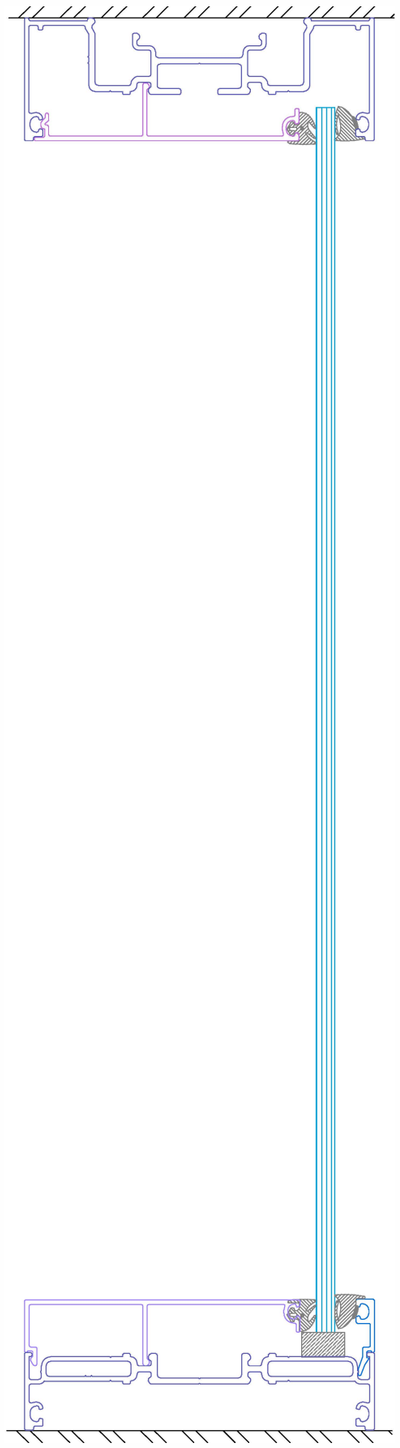
DATE: 02/05/2019 00:25 AM

DRG: **DET6101**

001–STANDARD HEAD
TO SOLID



002–STANDARD SINGLE
GLAZED HEAD



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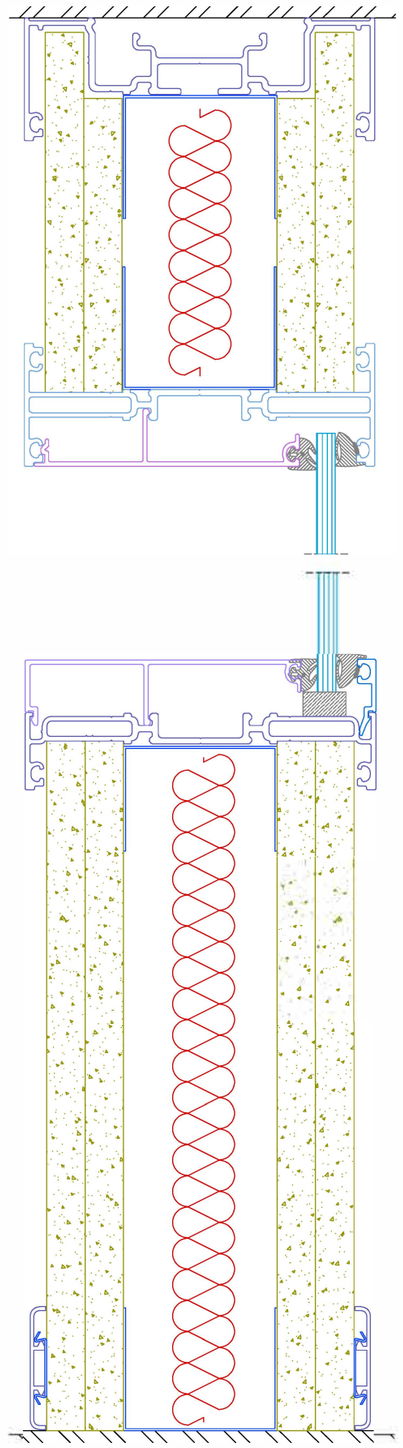
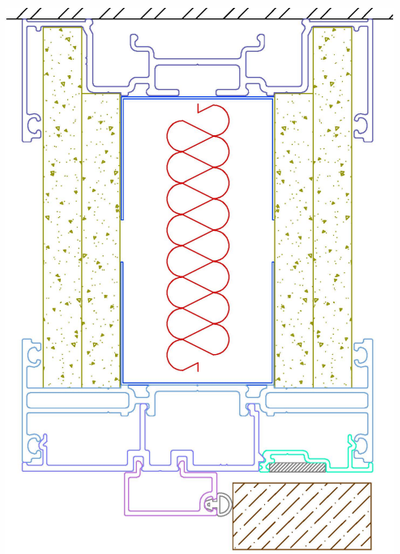
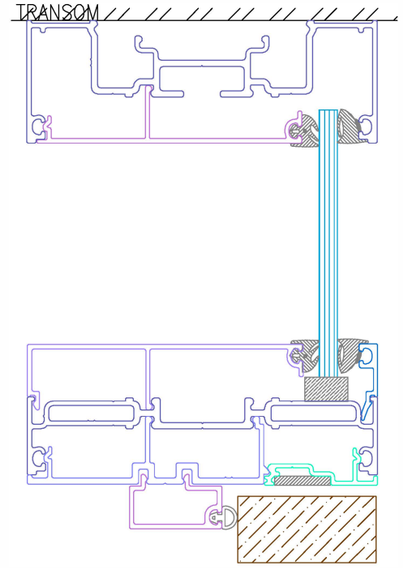
DOOR HEAD TRANSOM



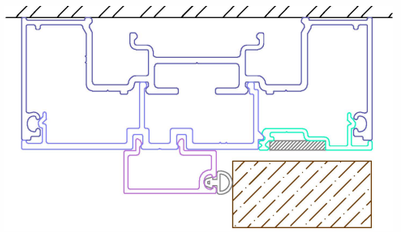
006–STANDARD SOLID
DOOR HEAD TRANSOM



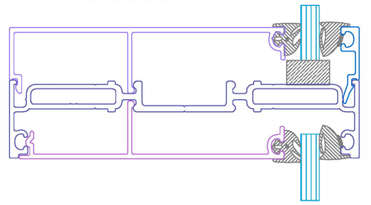
009–STANDARD SINGLE
GLAZED DOOR HEAD
TRANSOM



007–STANDARD FULL
HT. DOOR HEAD



008–SINGLE GLAZED
TRANSOM



004–SINGLE GLAZED
SILL

005–STANDARD SINGLE
GLAZED DADO RAIL

NOTES

LOGIKA 6000 ACCEPTS GLASS UP TO 13.5mm THICKNESS IN SINGLE OFFSET GLAZED CONFIGURATIONS USING A RANGE OF GASKET THICKNESSES.

Special items to order only!
ADAPTERS FOR GLASS UP TO 19mm THICKNESS IN CENTRE GLAZING.
DOOR STOP FOR 54mm THICKNESS DOOR LEAF.

CONFIDENTIAL

LOGIKA 6000
PARTITION SYSTEM

STANDARD HEAD WITH STANDARD BASE - OFFPSET 6-8mm SINGLE GLAZED VERTICAL SECTIONS THRU

LOGIKA PARTITIONS LIMITED
7 Lime Grove Estate
Falconer Road
Haverhill
Suffolk, CB9 7XU
Tel: 01440 764897
Fax: 01440703660

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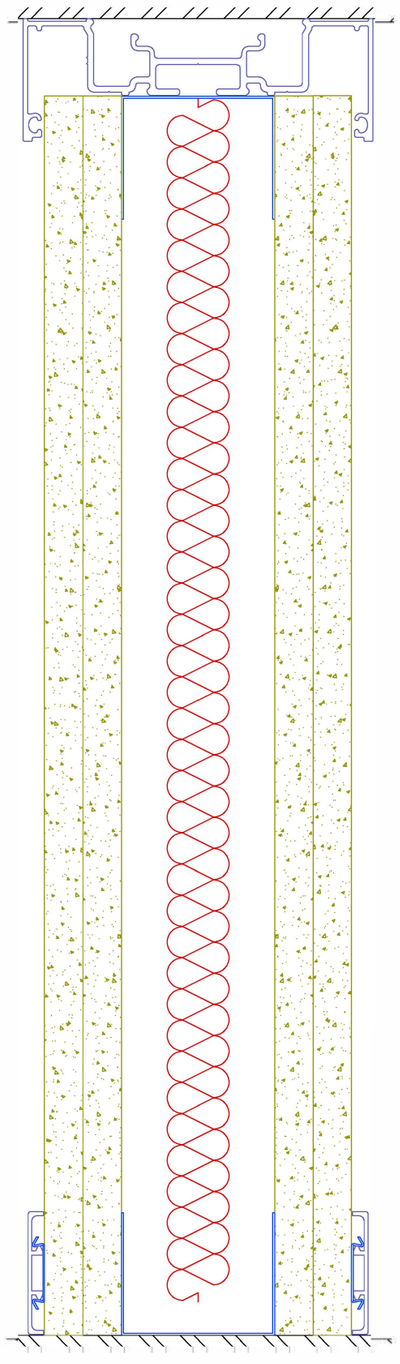
SCALE: 1:2 on A3

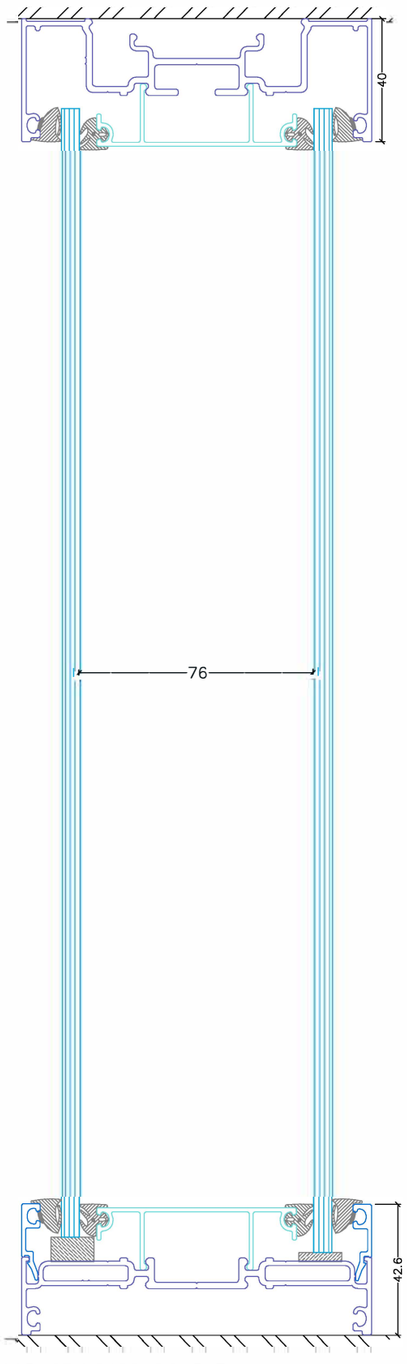
DRAWN BY: Tech Support
DATE: 02/05/2019 02:25 AM

DRG: **DET6102**

001–STANDARD HEAD
TO SOLID

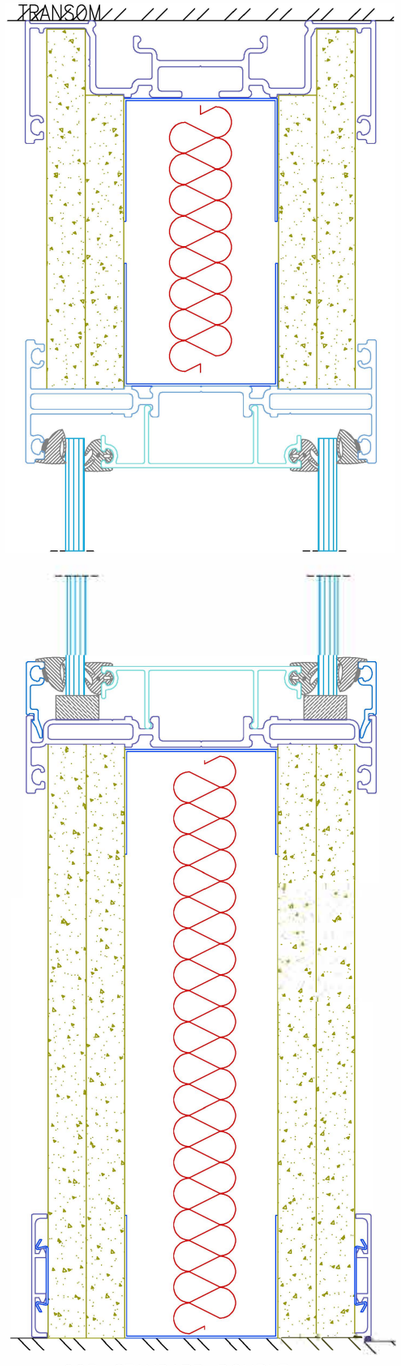


002–STANDARD DOUBLE
GLAZED HEAD



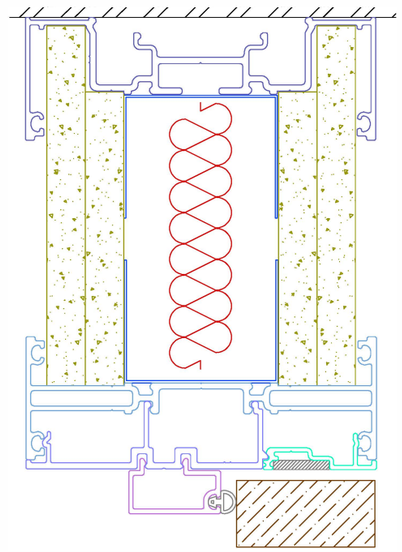
003–STANDARD DOUBLE
GLAZED SILL

004–STANDARD DBLE
GLAZED DOOR HEAD
TRANSOM

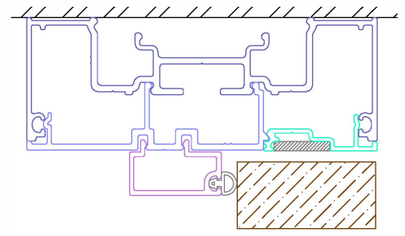


005–STANDARD DOUBLE
GLAZED DADO RAIL
ABOVE SOLID

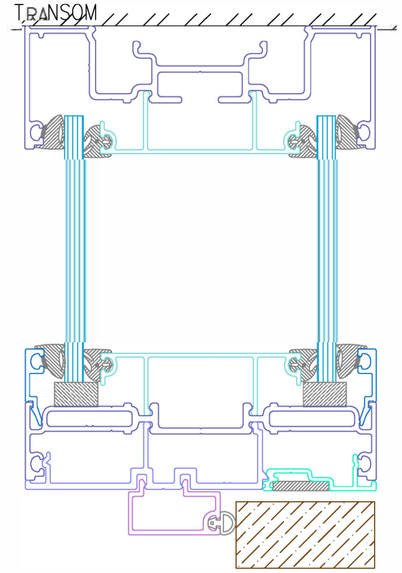
006–STANDARD SOLID DOOR HEAD
TRANSOM



007–STANDARD FULL
HT. DOOR HEAD



009–STANDARD DOUBLE
GLAZED DOOR HEAD
TRANSOM



NOTES:
LOGIKA 6000 ACCEPTS GLASS UP TO 13.5mm THICKNESS IN DOUBLE GLAZED CONFIGURATIONS USING A RANGE OF GASKET THICKNESSES.

DOUBLE GLAZING MULLIONS AVAILABLE:
STANDARD POST (as shown)
CLEAR GOHST POST (for 6mm and 12mm Glass)
MULLION FREE (using 12mm glass and dry joint)

CONFIDENTIAL

LOGIKA 6000
PARTITION SYSTEM

STANDARD - 6-8mm DOUBLE GLAZED VERTICAL SECTIONS THROUGH

LOGIKA PARTITIONS LIMITED
7 Lime Grove Estate
Falconer Road
Haverhill
Suffolk, CB9 7XX
Tel: 01440 764897
Fax: 01440783660

PAPER: STANDARD PAPER SIZE

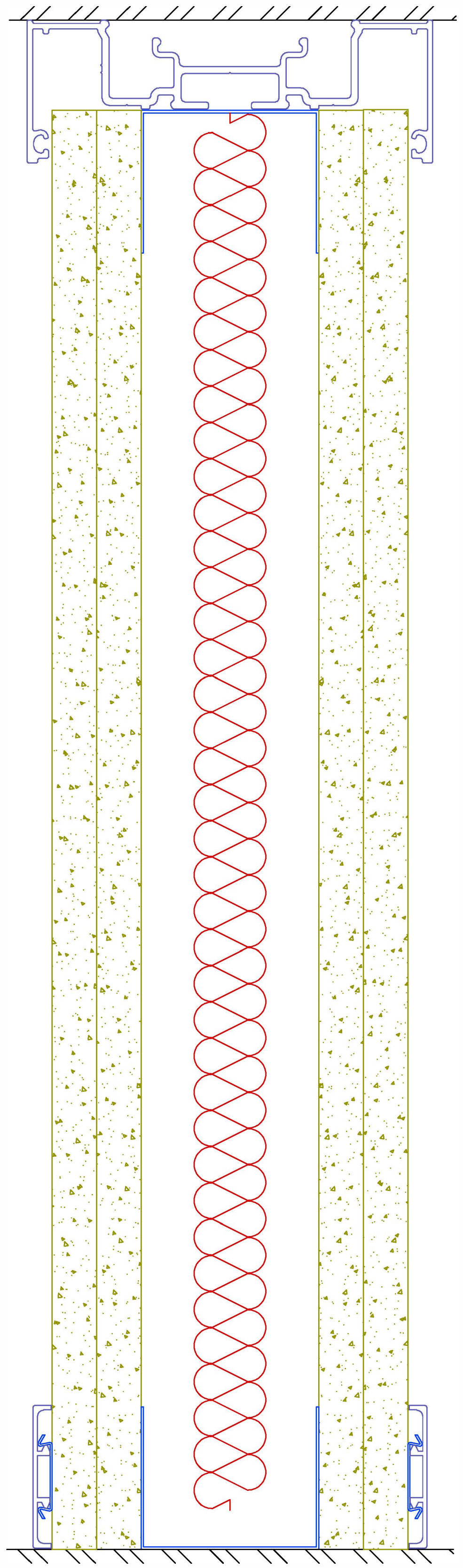
SCALE: 1:2 on A3

DRAWN BY: Tech Support

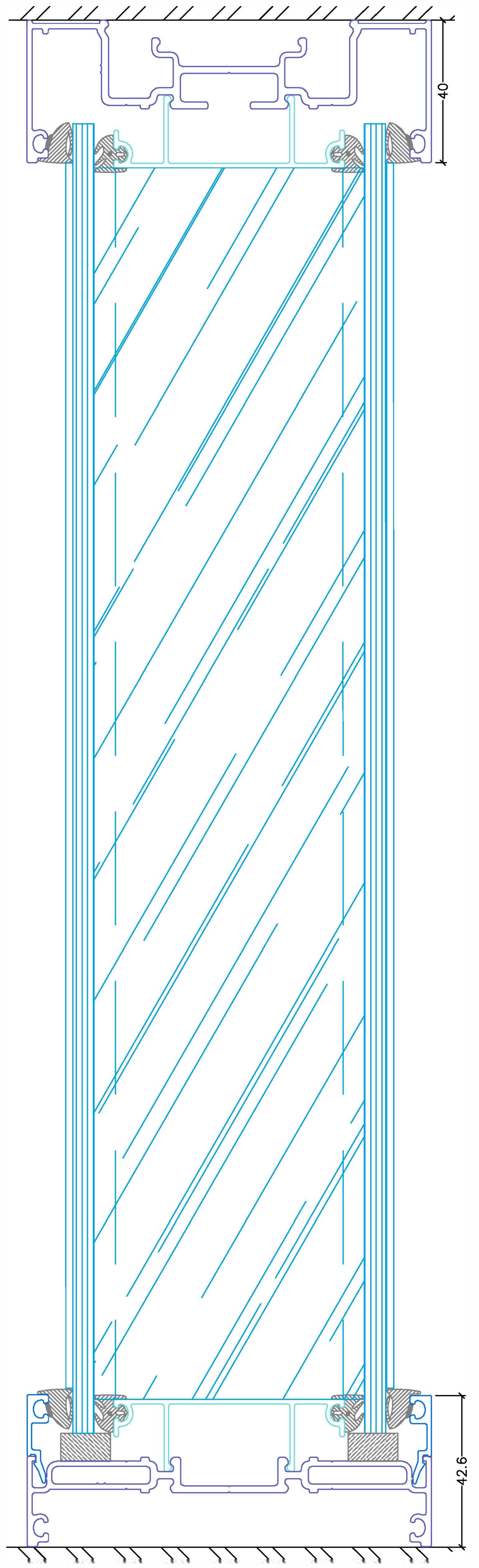
DATE: 02/05/2019 00:25 AM

DRG: **DET6103**

001-STANDARD HEAD
TO SOLID

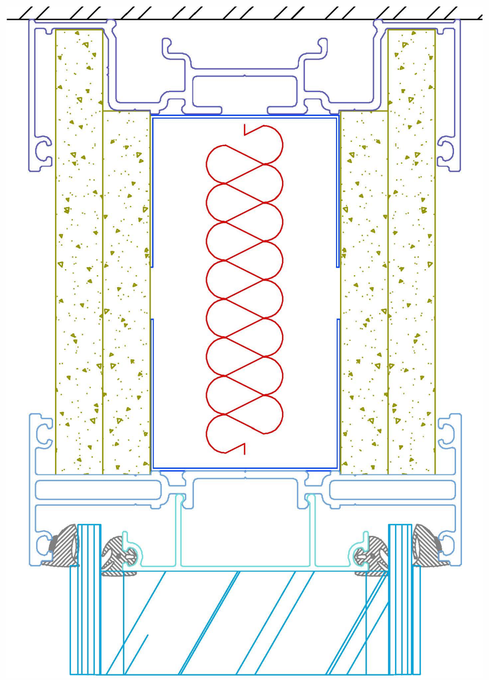


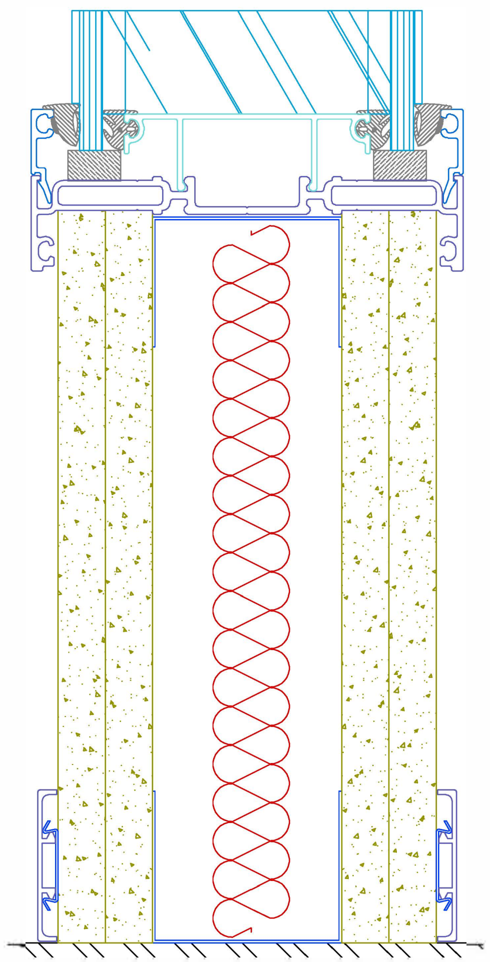
002-STANDARD HEAD
DOUBLE GLAZED GHOST POST



003-STANDARD DOUBLE
GLAZED SILL

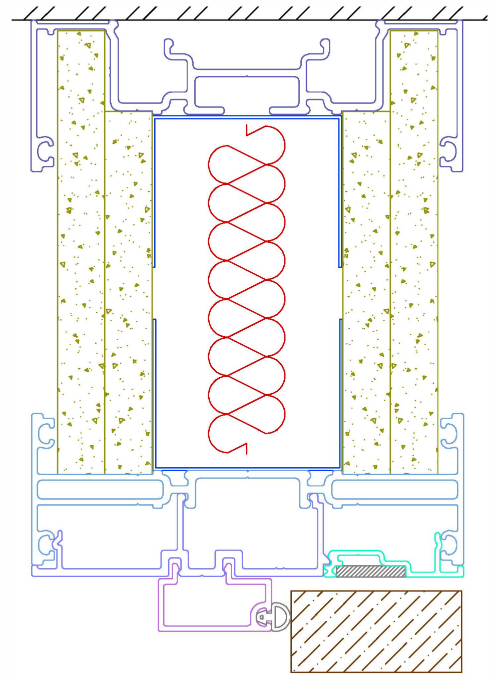
004-STANDARD DBLE GLAZED
DOOR HEAD TRANSOM



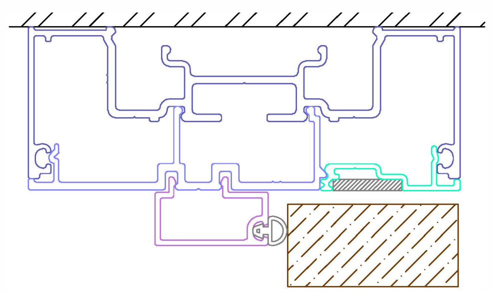


005-STANDARD DOUBLE
GLAZED DADO RAIL
ABOVE SOLID

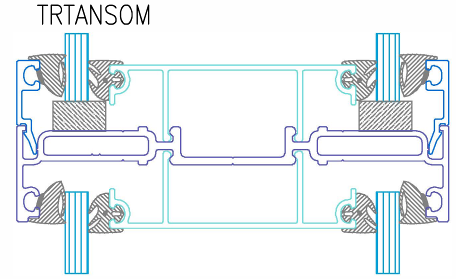
006-STANDARD SOLID DOOR HEAD
TRANSOM



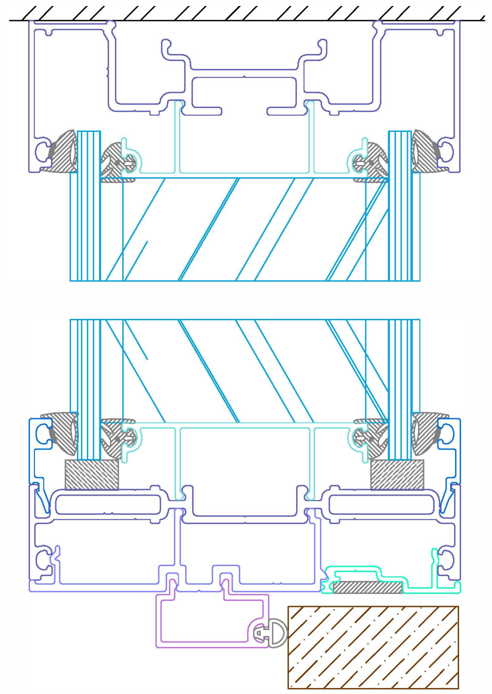
007-STANDARD FULL
HT. DOOR HEAD



008-DOUBLE GLAZED
TRTANSOM



009-STANDARD DOUBLE
GLAZED DOOR HEAD TRANSOM



NOTES:
LOGIKA 6000 ACCEPTS GLASS UP TO 13.5mm
THICKNESS IN DOUBLE GLAZED CONFIGURATIONS.
USING A RANGE OF GASKET THICKNESSES.

DOUBLE GLAZING MULLIONS AVAILABLE:
STANDARD POST (as shown)
CLEAR GOHST POST (for 6mm and 12mm Glass)
MULLION FREE (using 12mm glass and dry joint)

CONFIDENTIAL
LOGIKA 6000
PARTITION SYSTEM
STANDARD - 6-8mm DOUBLE
GLAZED GHOST POST
VERTICAL SECTIONS
THROUGH

LOGIKA PARTITIONS LIMITED
7 Lime Grove Estate
Falconer Road
Haverhill
Suffolk, CB9 7XU
Tel: 01440 764897
Fax: 01440703660

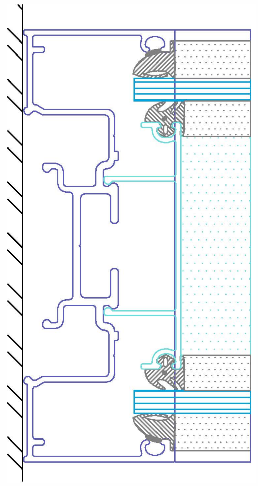
PATENTS: [illegible]

SCALE: 1:2 on A3

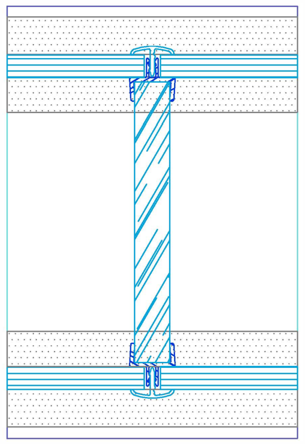
DRAWN BY: Tech Support
DATE: 02/05/2019 00:25 AM

DRG: DET6104

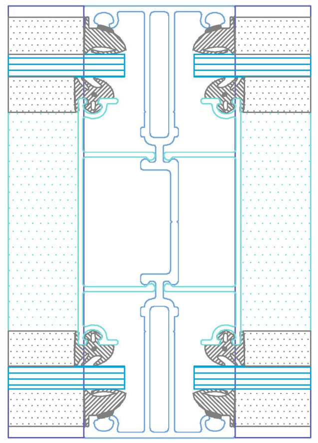
001-STANDARD DOUBLE GLAZED ABUTMENT



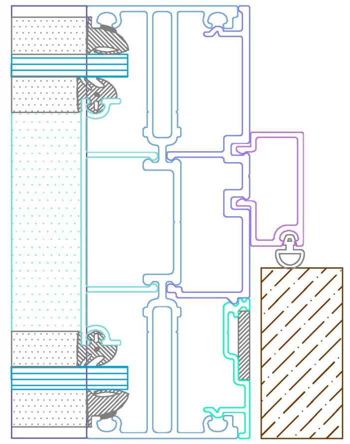
002-DOUBLE GLAZED GHOST POST



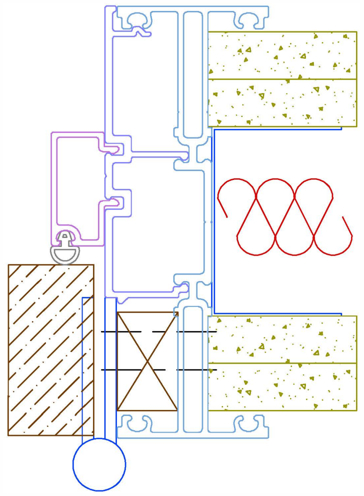
003-DOUBLE GLAZED MULLION POST



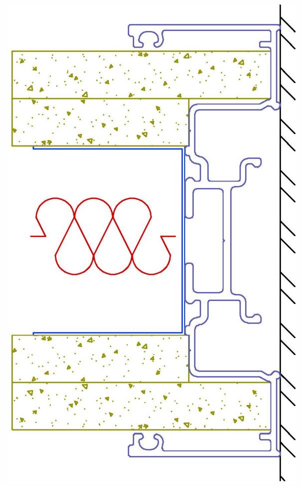
004-DOOR POST TO DOUBLE GLAZED LATCH SIDE ONLY)



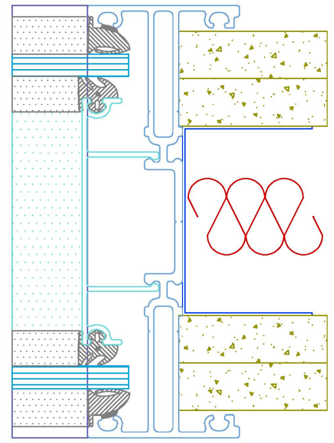
05-STANDARD DOOR POST TO SOLID



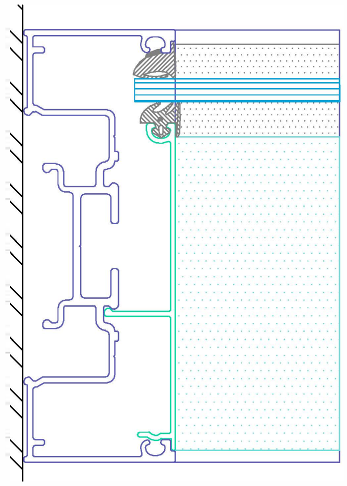
006-STANDARD SOLID ABUTMENT



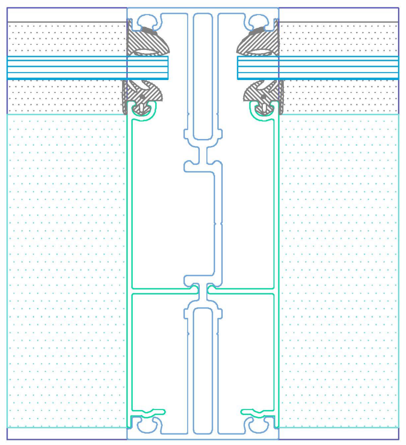
007-STANDARD DOUBLE GLAZED POST TO SOLID



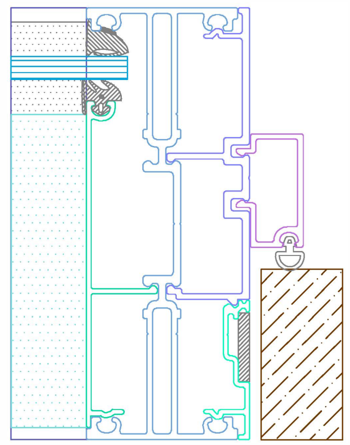
008-STANDARD SINGLE GLAZED ABUTMENT



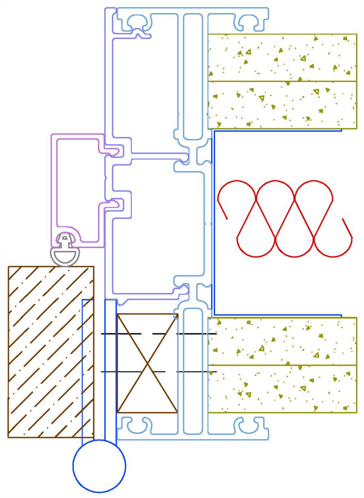
009-SINGLE GLAZED MULLION POST



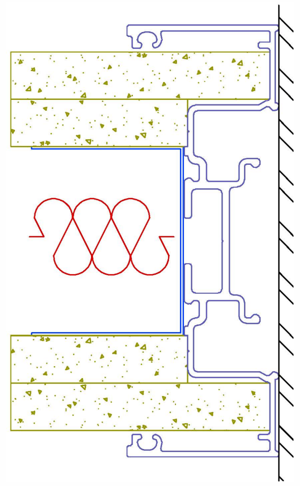
010-DOOR POST TO SINGLE GLAZED



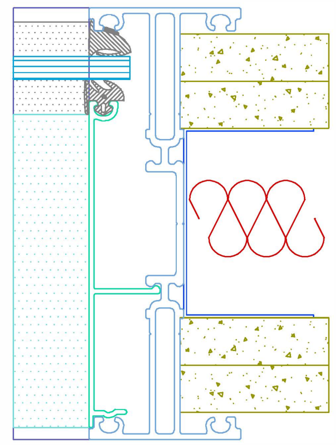
011-STANDARD DOOR POST TO SOLID



012-STANDARD SOLID ABUTMENT



013-STANDARD SINGLE GLAZED POST TO SOLID



OPTIONAL DOOR STOP AVAILABLE FOR 54mm THICKNESS DOOR LEAF.

NOTES:
LOGIKA 6000 ACCEPTS GLASS UP TO 13.5mm THICKNESS IN DOUBLE GLAZED CONFIGURATIONS. USING A RANGE OF GASKET THICKNESSES.

DOUBLE GLAZING MULLIONS AVAILABLE:
STANDARD POST (as shown)
CLEAR GHOST POST (for 6mm – 8mm Glass)
MULLION FREE (using 12mm glass and dry joint)

CONFIDENTIAL
LOGIKA 6000
PARTITION SYSTEM
STANDARD - 6-8mm DOUBLE & SINGLE GLAZED OPTIONS HORIZONTAL SECTIONS THROUGH

LOGIKA PARTITIONS LIMITED
7 Lime Grove Estate
Falconer Road
Haverhill
Suffolk, CB9 7XU
Tel: 01440 764897
Fax: 01440703660

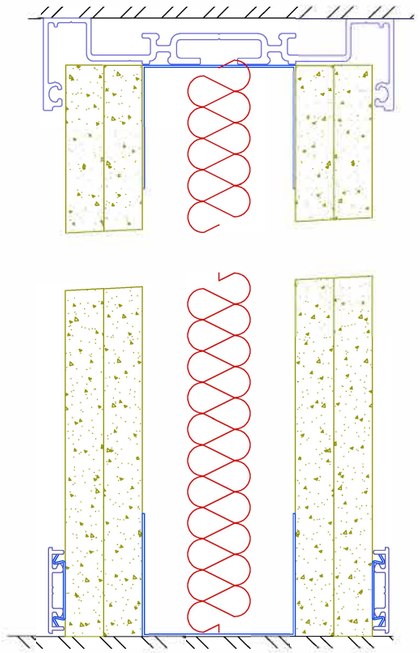
PATENTS: [illegible]

SCALE: 1:2 on A3

DRAWN BY: Tech Support
DATE: 02/05/2019 00:25 AM

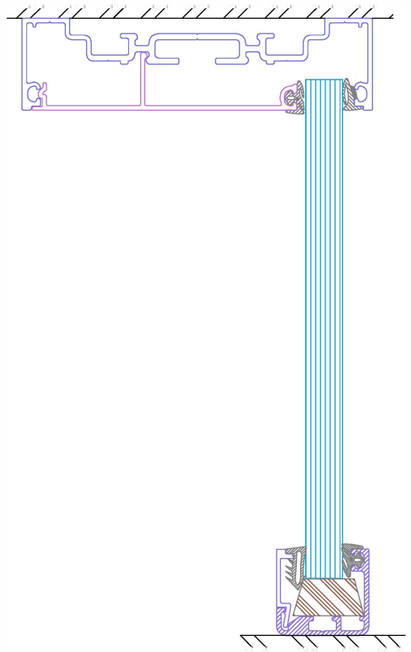
DRG: **DET6105**

101–SLIMLINE HEAD TO SOLID



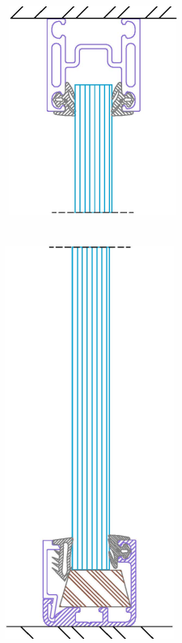
001B – SOLID BASE DETAIL

102–SLIMLINE 12 SINGLE OFFSET GLAZED



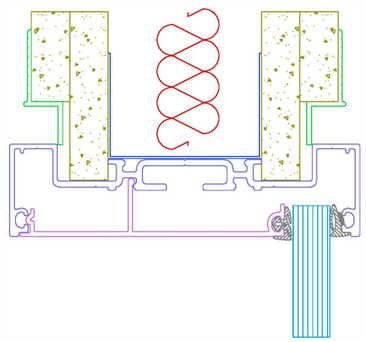
104–SLIMLINE 12mm SINGLE GLAZED

103–SLIMLINE 12mm SINGLE GLAZED HEAD

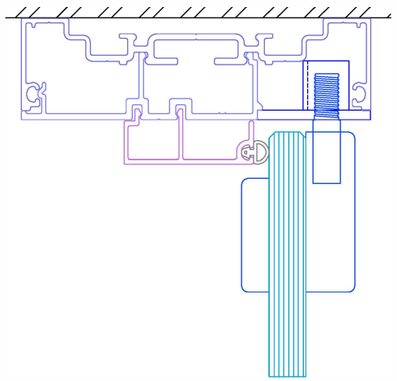


105–SLIMLINE 12mm SINGLENGLAZED SILL

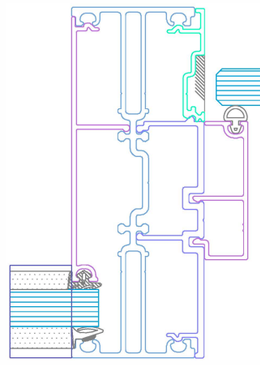
106–SLIMLINE SHADOW BULKHEAD HEAD TO 12mm OFFSET SINGLE GLAZED



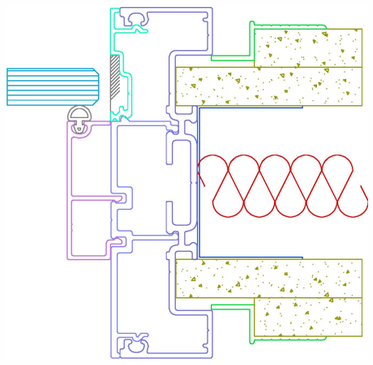
107–SLIMLINE FULL HT. GLASS DOOR OFFSET PIVOT



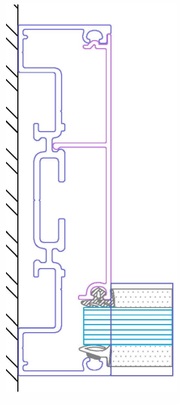
108–DOOR POST TO 12mm SINGLE GLAZED (LATCH SIDE ONLY)



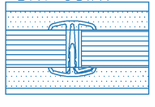
109–SLIMLINE/SHADOW DOOR POST TO SOLID (LATCH OR HINGE SIDE)



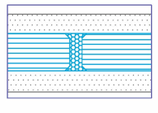
110–SLIMLINE SINGLE 12mm GLAZED ABUTMENT



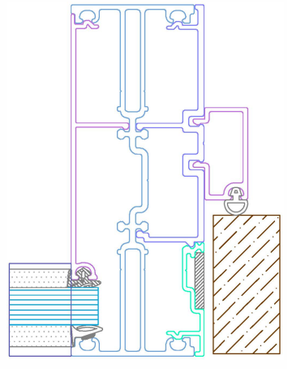
111–SINGLE 12mm GLAZED DRY JOINT



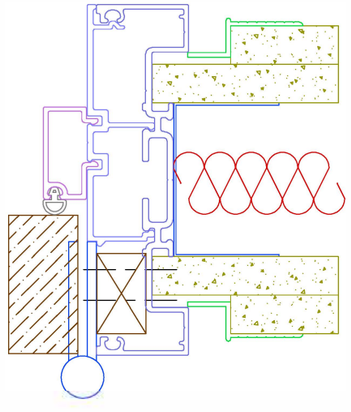
112–SINGLE 12mm SILICON JOINT



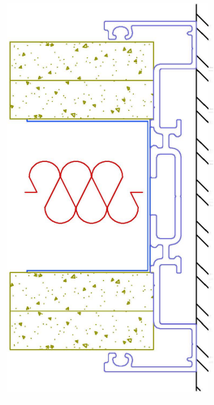
113–DOOR POST TO SINGLE OFFSET GLAZED (LATCH SIDE ONLY)



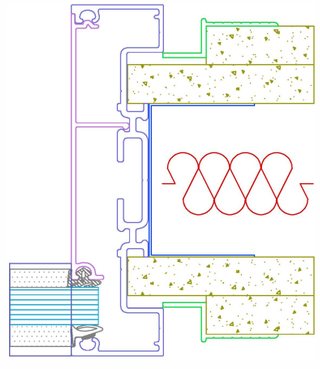
114–SLIMLINE/SHADOW DOOR POST TO SOLID (LATCH OR HINGE SIDE)



115–SLIMLINE SOLID ABUTMENT



116–SLIMLNE/SHADOW DOUBLE GLAZED POST TO SOLID



CONFIDENTIAL

LOGIKA 6000 100mm FRAMING SYSTEM

SLIMLINE HEAD WITH NARROW BASE -OFFSET SINGLE GLAZED DETAILS & SECTIONS

LOGIKA PARTITIONS LIMITED
7 Lime Grove Estate
Falconer Road
Haverhill
Suffolk, CB9 7XU
Tel: 01440 764897
Fax: 01440783660

PRINTS: [illegible]

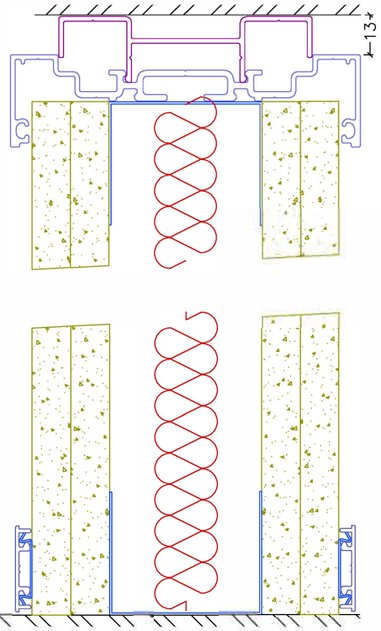
SCALE: 1:2 on A3

DRAWN BY: Tech Support

DATE: 02/05/2019 00:25 AM

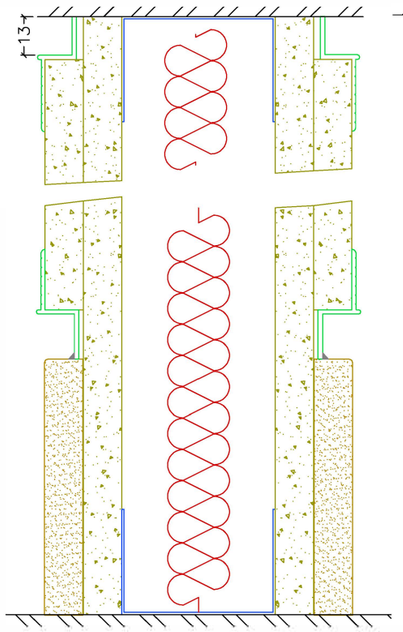
DRG: DET6501

101–SLIMLINE SHADOW HEAD TO SOLID



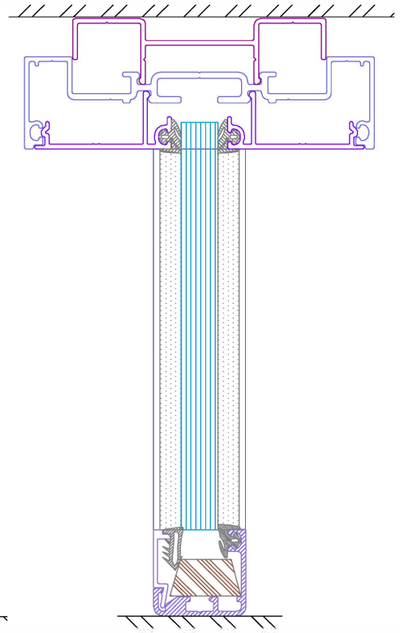
101B – SOLID BASE DETAIL

101A–SHADOW TRIM HEAD TO SOLID



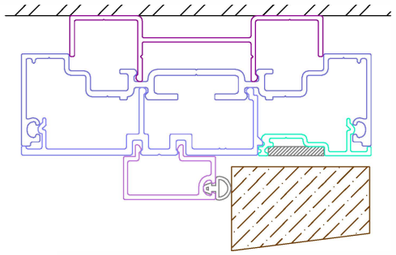
101C – SHADOW TRIM WITH MDF RECESSED SKIRITNG

102–SLIMLINE SHADOW HEAD TO 12mm SINGLE CENTRE GLAZED

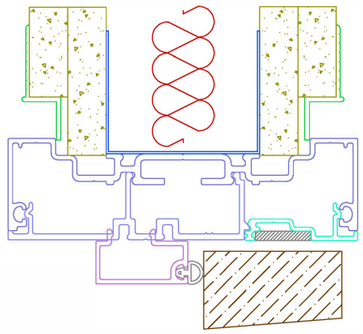


103–SLIMLINE SINGLE GLAZED SILL

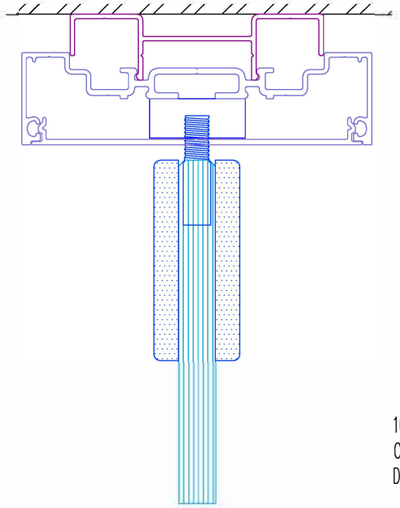
104–SLIMLINE FULL HT. DOOR SHADOW HEAD



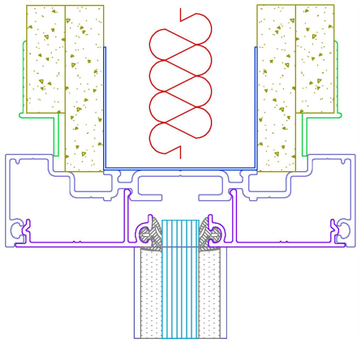
107–SLIMLINE SOLID TO SHADOW DOOR HEAD TRANSOM



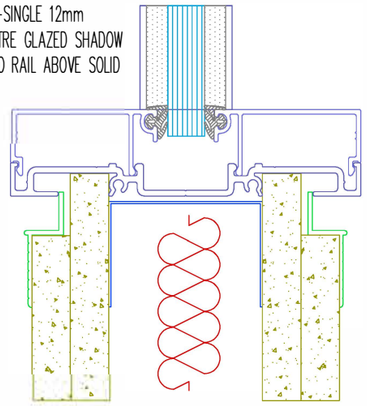
105–SLIMLINE SHADOW HEAD TO FULL HT. GLASS DOOR



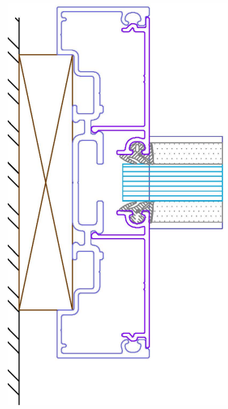
106–SLIMLINE SOLID ABOVE SHADOW 12mm CENTRE GLAZED TRANSOM



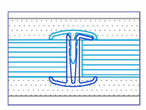
108–SINGLE 12mm CENTRE GLAZED SHADOW DADO RAIL ABOVE SOLID



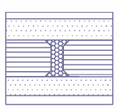
109–SHADOW PACKER TO 12mm SINGLE CENTRE GLAZED ABUTMENT



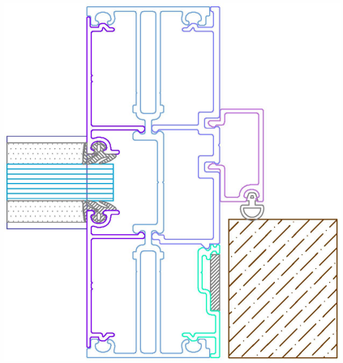
111–SINGLE 12mm GLAZED DRY JOINT



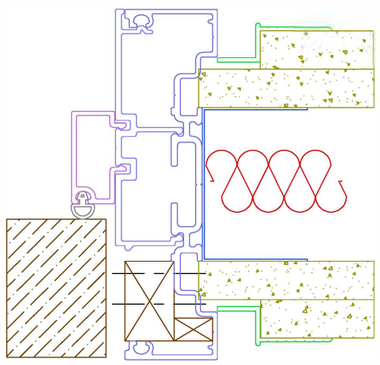
112–SINGLE 12mm GLAZED SILICON JOINT



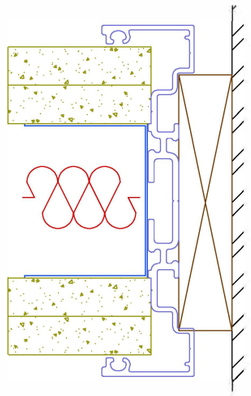
113–DOOR POST TO SINGLE 12mm CENTRE GLAZED (LATCH SIDE ONLY)



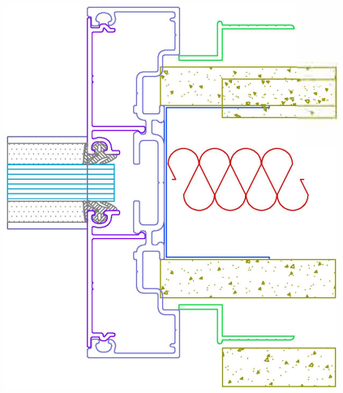
114–SHADOW DOOR POST TO SOLID



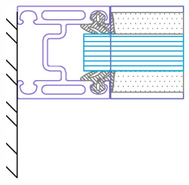
115–SHADOW SOLID ABUTMENT



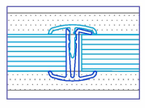
116–SHADOW 12mm SINGLE CEMTRE GLAZED POST TO SOLID



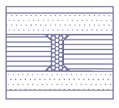
117–SLIMLINE ABUTMENT TO 12mm GLASS



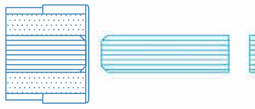
118–SINGLE 12mm GLAZED DRY JOINT



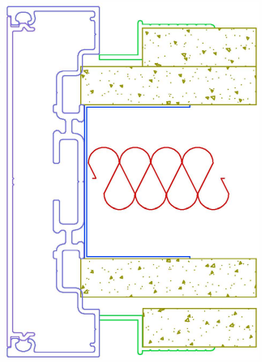
119–SINGLE 12mm GLAZED SILICON JOINT



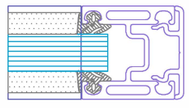
120–SINGLE 12mm SILL END CAP TO DOOR OPENING



121–SINGLE 12mm SOLID TO DOOR OPENING



122–SINGLE 12mm FAIR END



CONFIDENTIAL

LOGIKA 6000 100mm FRAMING SYSTEM

SLIMLINE SHADOW HEAD & POST WITH NARROW BASE CENTRE GLAZED DETAILS & SECTIONS

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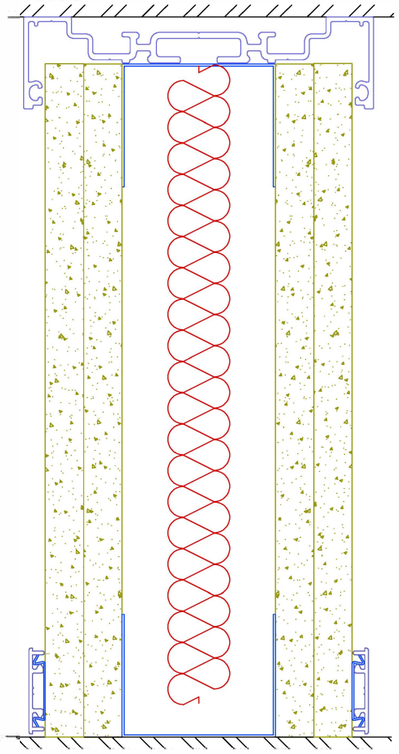
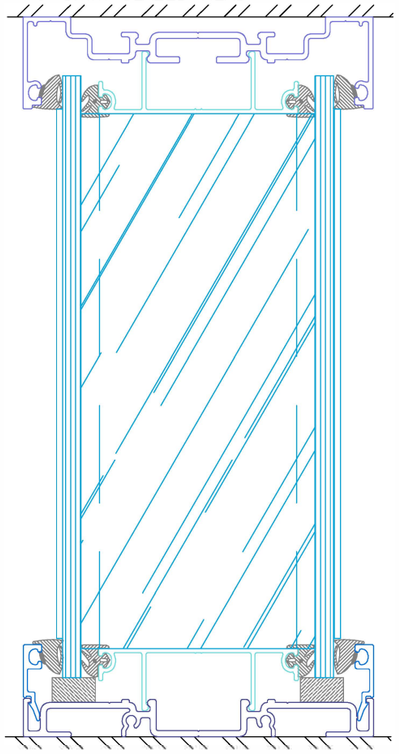
DRG: DET6502

101–SLIMLINE HEAD TO SOLID

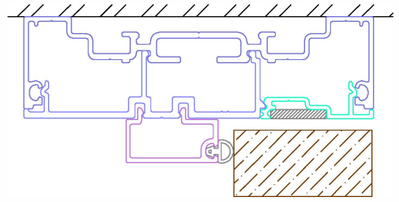


202–SLIMLINE DOUBLE 6–8mm GLAZED HEAD

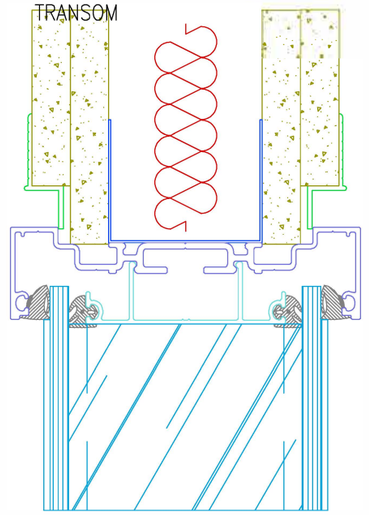


23–LOW PROFILE DOUBLE GLAZED SILL

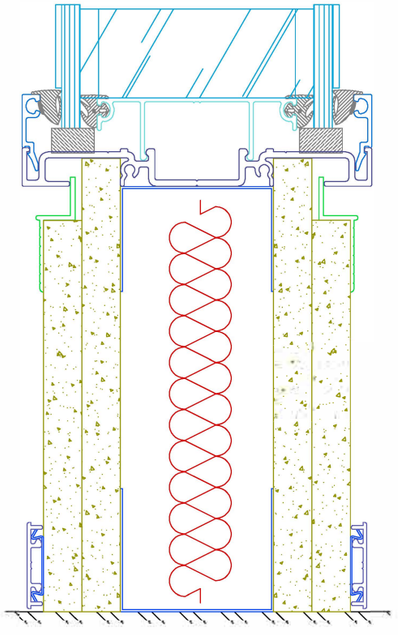
003–SLIMLINE FULL HT. DOOR HEAD



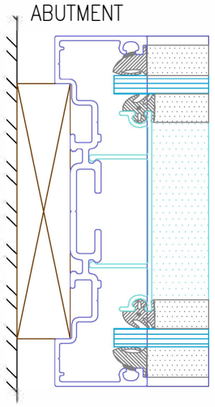
004–SOLID ABOVE SLIMLINE SHADOW 6–mm GLAZED TRANSOM



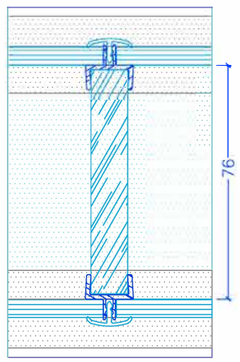
005–DOUBLE 6–8mm GLAZED SHADOW DADO RAIL ABOVE SOLID



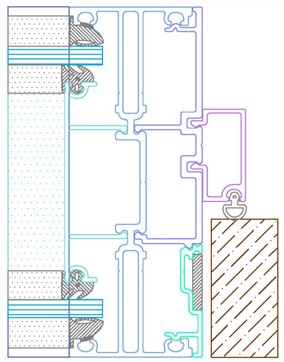
006–SHADOW DOUBLE 6–8mm GLAZED ABUTMENT



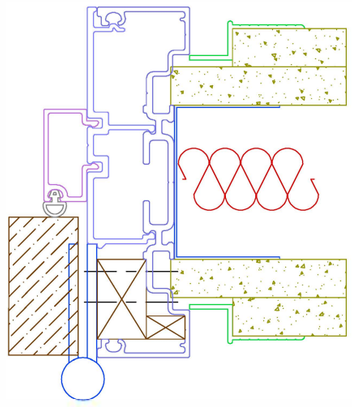
007–DOUBLE 6–8mm GLAZED CLEAR GHOST POST



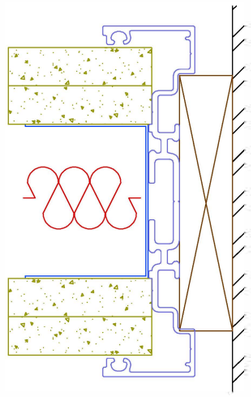
008–DOOR POST TO 6–8mm DOUBLE GLAZED LATCH SIDE ONLY)



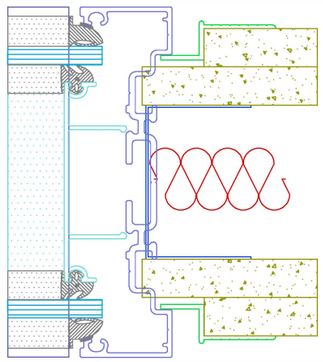
009–SHADOW DOOR POST TO SOLID



010–SHADOW (PACKER) SOLID ABUTMENT



011–SHADOW 6–8mm DOUBLE GLAZED POST TO SOLID



NOTE: LOGIKA 6000 ACCEPTS GLASS FROM 6mm TO 12.5mM THICKNESS.
GHOST POSTS MUST BE USED FOR ALL GLASS THICKNESSES BELOW 12mm.
MULLION FREE DOUBLE GLAZING IS AVALABLE IN 12mm GLASS UP TO 3050mm HIGH

CONFIDENTIAL

LOGIKA 6000
PARTITION SYSTEM

DOUBLE GLAZED GHOST POST SLIMLINE HEAD WITH LOW PROFILE SILL DETAILS & SECTIONS

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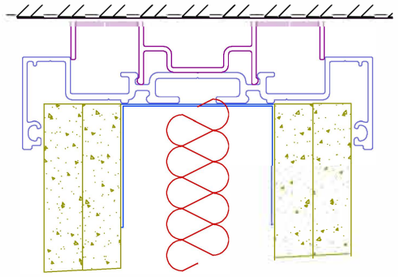
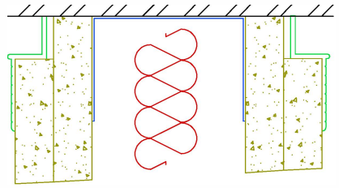
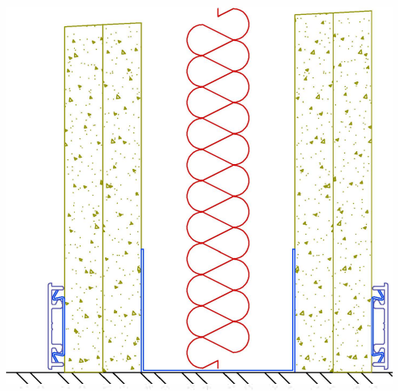
001–SLIMLINE
RECESSED HEAD TO
SOLID

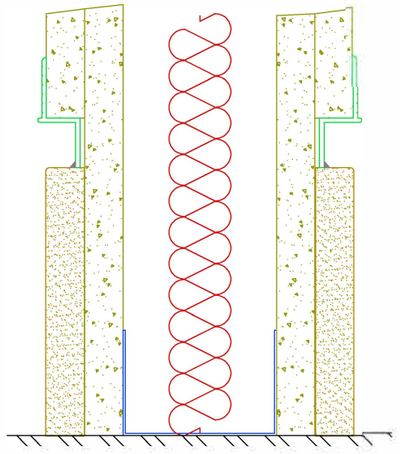


001A–SHADOW TRIM HEAD TO SOLID



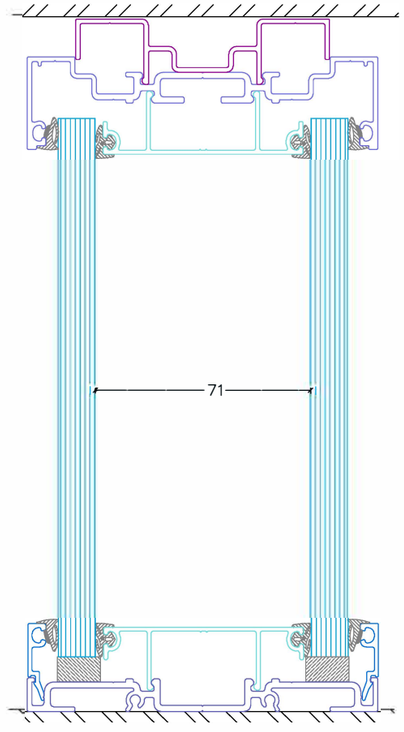


001B – SOLID BASE
DETAIL

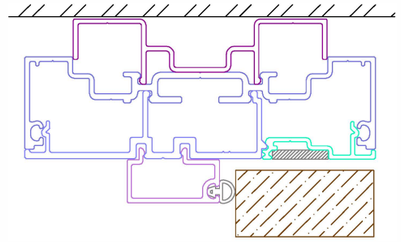


001C – SHADOW TRIM
WITH MDF
RECESSED SKIRITNG

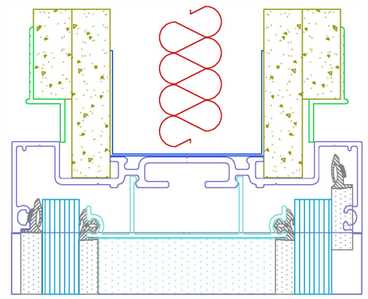
002–SLIMLINE
RECESSED DOUBLE
GLAZED DRY JOINT



003–SLIMLINE
RECESSED FULL HT.
DOOR HEAD

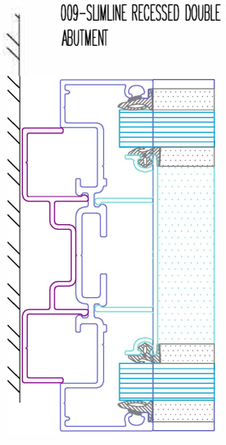


006–SLIMLINE SHADOW BULKHEAD TO HEAD DOUBLE GLAZED DRY JOINT

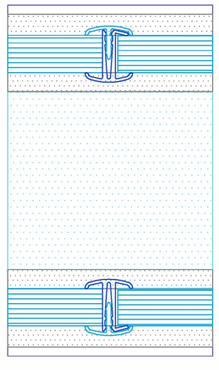


NOTE: LOGIKA 6000 ACCEPTS GLASS FROM
6mm TO 12.5mM THICKNESS.
GHOST POSTS MUST BE USED FOR ALL GLASS
THICKNESSES BELOW 12mm.
MULLION FREE DOUBLE GLAZING IS AVALABLE
IN 12mm GLASS UP TO 3050mm HIGH

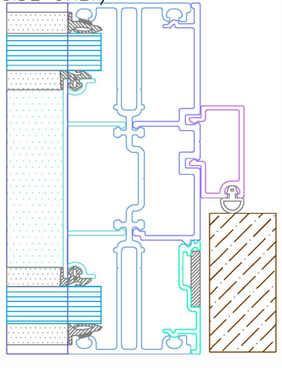
009–SLIMLINE RECESSED DOUBLE GLAZED
ABUTMENT



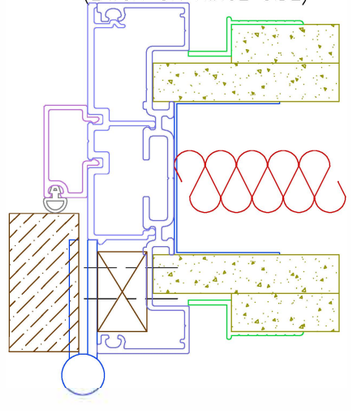
010–DOUBLE GLAZED
"MULLION FREE" DRY
JOINT



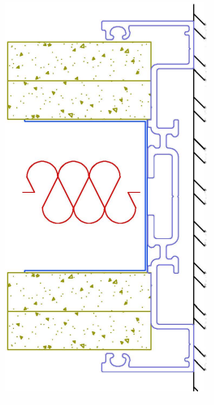
011–DOOR POST TO
DOUBLE GLAZED (LATCH
SIDE ONLY)



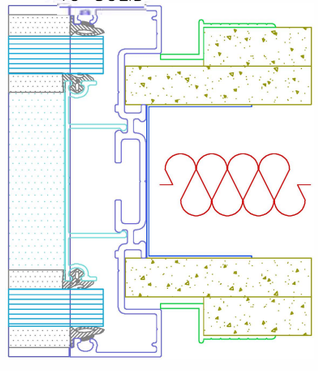
012–SLIMLINE/SHADOW
DOOR POST TO SOLID
(LATCH OR HINGE SIDE)



013–SLIMLINE SOLID
ABUTMENT



014–SLIMLNE/SHADOW
DOUBLE GLAZED POST
TO SOLID



CONFIDENTIAL

LOGIKA 6000
PARTITION SYSTEM

DOUBLE GLAZED SLIMLINE HEAD WITH LOW PROFILE SILL - "MULLION FREE" GLAZING DETAILS & SECTIONS

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DATE: 02/05/2019 00:25 AM

DRG: DET6504

APPENDIX 2

Summary Acoustic

& FIRE Tests

LOGIKA PARTITIONS LIMITED. 7 Lime Grove Estate, Falconer Road, Haverhill, Suffolk, CB9 7XU Tel: 01440 764897 Fax: 01440703660

REPORT No:	**CONSTRUCTION**	**RATING:**
ACOUSTIC		
BTC 3249A	SINGLE LAYER 15mm GYPSUM + 30mm RW2 ROCKWOOL	46dB Rw
BTC 3251A	SINGLE GLAZED	38dB Rw
BTC 3280A	DOUBLE GLAZED 6.4mm LAM + 7mm LAM GLASS	42dB Rw
BTC 2143A	DITTO WITH 6.4mm LAM + 7.4mm ACOUSTIC GLASS	46dB Rw
BTC 3250A	ACOUSTIC DOOR IN 46dB Rw WALL Add 2dB Rw for 48dB Rw Wall	34dB Rw
BTC 2141A	SINGLE LAYER 15mm GYPSUM + 30mm RW2 ROCKWOOL	45dB Rw
BTC 2142 A	DITTO + ADD'TL 12.5 GYPSUM INTERNAL PANEL	48dB Rw
AIRO 2097/2	STANDARD DOOR IN 45dB Rw WALL	30dB Rw

FIRE	**CONSTRUCTION**	**RATING:**
CFR0901281	DOOR	30 MIN. INTEG
WFRC100916	GLASS 2602x900	74 MIN. INTEG
WFRC54031	SOLID , CLIPPED 12.5 GYPSUM	33 / 33 MIN.
WFRC54792	SOLID, CLIPPED 15 GYPSUM	45 / 45 MIN.
WFRC54974	SOLID, SCREWED 15 GYPSUM FL	90 / 77 MIN

Note: all solid elevations include RW2 ROCKWOOL in void and all boards are SINGLE layer. (FL = fibre glass reinforced gypsum)

APPENDIX 3

C.O.S.H.H
SAFETY INFORMATION
And General Method Statements

LOGIKA PARTITIONS LIMITED. 7 Lime Grove Estate,
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C.O.S.H.H

HAZARD DATA

FOR

LOGIKA 3000/5000/600

PARTITION SYSTEM

Logika 3000/5000/6000 are demountable partition systems that are assembled in accordance with the manufacturers' recommendations. Many differing materials are incorporated within the product and therefore there is no overall guide to the safety in the use and handling of such materials. This document has been produced by compiling summary extracts from manufacturers and suppliers safety advice.

The extracts given are by no means exhaustive and cannot possibly cover all possible combinations of materials specified for use in the Logika 3000 and Logika 5000 products. The following therefore addresses those materials which are generally used with the product or used to manufacture the product. More specific information can be obtained from the manufacturers of the materials upon request.

GENERAL USAGE:

In the general use of Logika 3000, Logika 5000, Logika 6000 the following recommendations should be followed:

1. Always use materials supplied in the manner for which they were intended. Reference should be made to our **Specification, Installation guides** (which describe materials and usage) **and technical notes** (which are issued from time to time). In all circumstances materials used are not fit for human consumption and should only be used for the installation of a demountable partition system.
2. Where board, panel or fibrous materials are machined, cut, bored, planed, sanded or subjected to any site process which creates dust then appropriate respiratory precautions should be taken (refer to EH40 for exposure information). Where possible always protect adjacent areas from the effects of dust migration using suitable screening and extraction where necessary.
3. If skin contact with dust causes irritation then cease the activity creating the dust and wash affected area with clean cold water. Only re-commence activity after the cause has been established and when suitable preventative measures have been taken. For example barrier cream applied to hands will help to prevent skin irritation. In all situations wear protective clothing which will reduce the risk of exposure to such hazards.
4. If respiratory irritation is suspected move away from the contaminated area to a well ventilated area until respiration becomes normal. If this does not stop the problem seek urgent medical advice.
5. The assembly of partition systems involve the use of metal cutting, boring and shaping in; floor, wall and overhead situations. Wear protective eye shields at all times and be sure wear suitable protective gloves to prevent hazards from sharp metal profiles. All **Logika 3000/5000/6000** steel profiles are de-burred to reduce risk from sharp edges; however once cut at site these materials do have sharp edges and should be handled with care.
6. Be aware of electrical wiring in the vicinity of the partition installation and take care not bring the metal framework into contact with electrical sources. Where possible always earth bond the metal framework to prevent the risk of electrical shock. Particular care must be taken when installing switches within the system. Always ensure that the cabling to the switch is totally isolated from the supply BEFORE either terminating or

removing switch wiring. Ensure that the partition framing is fully earthed and that the earth connection makes good contact with a NON-COATED metal surface.

7. Take care when handling PVC materials as these may become statically charged. Any resulting spark could ignite adjacent inflammable atmosphere. Be aware of the possibility of flammable fumes and take care to know the location of a suitable extinguisher.
8. Take care when heating Heat Shrinkable Shrouds used for insulating switches. These may emit fumes which can cause breathing difficulties in some personnel. Always use in a well ventilated area, or provide additional ventilation to extract fumes.
9. Many adhesives, sealants, jointing compounds, foam tapes and aerosols contain flammable gases or emit fumes during the curing or application process. Always use in well ventilated areas or if this is not possible ensure operatives are equipped with correct respiratory apparatus and take the correct fire precautions. All flammable materials are clearly marked on their packaging together with safety instructions which must be followed. Always store flammable substances in a fire proof enclosure where possible and keep a suitably charged extinguisher adjacent to this storage area.
10. Whenever there is any doubt as to the safety of a material please consult our technical department.
11. If any irritation or side effect of handling materials persists then immediately seek medical advice. It will be of assistance if you could take a label from or a suitably sealed sample of the suspected material, for examination by your medical adviser.
12. Always ensure that operatives clean their hands following the handling of any materials used in Logika 3000. Particular care should be taken before handling food or other consumables which could transmit contamination into the mouth.
13. Where an operation could affect other personnel in the vicinity of the work being carried out, make sure that the safety officer and or any other responsible person is advised of the potential danger, and agrees on any precautions that may be required before work proceeds.

STORAGE AND DISPOSAL

(unless indicated otherwise on product packaging)

STORAGE

All products should be stored in a clean dry area, away from excessive heat and where applicable the area may need to be ventilated.

Ensure that materials do not block any means of fire escape.

Keep all flammable materials in a protected storage area with suitable access to the correct type of extinguisher.

When packaging has been removed ensure it is not left on the floor where it can trip up other operatives or form a fire hazard.

Protect ends of any sharp metal section, particularly where they protrude onto walk-ways or access routes. Where possible avoid storing such materials adjacent to access routes. Erect warning signs in public areas

DISPOSAL

Only dispose of excess material and packaging waste in accordance with local authority regulations

Do not burn any waste material as it may cause toxic fumes.

Do not dispose of any waste materials into a sewer, river or waterway.

Only use approved disposal sites as licensed by the local authority.

Appendices follow:

APPENDIX 3A

EXTRACTS FROM SUPPLIER INFORMATION

MINERAL WOOL

The Institute for Research on Cancer (IARC) has concluded that mineral wool should be classified as "possibly carcinogenic" The DHSS committee on Carcinogenicity has concluded that it would be prudent to act on the basis that sufficient exposure to man made mineral fibres in industry "may increase the risk of lung cancer among the work-force"

A comprehensive international research programme has been completed covering epidemiological, animal and hygiene studies. The reports of cancer excess in workers with 30 or more years since first exposure in some rock wool plants deserves more study and must be carefully balanced against the large body of scientific information involving human and animal studies, where no increased risk of disease is suggested. There has been no increase in non-malignant respiratory disease and no increased risk of mesothelioma. However in situation where mineral wool is being handled, steps should be taken to ensure that exposure to dust is kept to a minimum reasonable level and not in excess of control limits.

+ FIRE -

The product does not constitute a fire hazard, although some facings may burn when exposed to fire.

+ STORAGE -

No special precautions - materials should be stored in a dry place.

+ RESPIRATORY PROTECTION -

When installing mineral wool it is recommended that a suitable disposable face mask to BS6016 is worn.

+ CLOTHING -

Avoid clothing with tight constrictions at neck and wrists and always wash separately from normal family clothing.

+ SKIN IRRITATION -

Wear gloves when handling. If irritation is experienced it can be lessened or sometimes prevented by rinsing under cold running water before applying soap when washing.

+ BARRIER CREAMS -

Can help some skin types but are a matter of personal choice.

+ EYE PROTECTION -

Always use when applying material overhead.

+ PERSONAL HYGIENE -

Always maintain adequate standards of personal hygiene.

+ WASTE DISPOSAL -

The material is not hazardous and should be disposed of in accordance with local regulations.

+ EMERGENCY ACTION -

If excessive irritation of the skin, eyes or throat persists then consult with a doctor immediately

+ ADDITIONAL INFORMATION -

H & SE guidance notes: EH46 and EH40

APPENDIX 3B

EXTRACTS FROM SUPPLIER INFORMATION

PLASTERBOARD

+ FIRE -

The product does not constitute a fire hazard, although facings may burn when exposed to fire.

+ STORAGE -

Always carry boards singly on one edge, do not drag one board over the other - materials should be stored in a dry place protected against damp on a level surface. Maximum stack height should be 1000mm.

+ RESPIRATORY PROTECTION -

When cutting or sanding plasterboard in confined spaces it is recommended that a suitable disposable face mask to BS6016 is worn. Use dust extraction if dust levels cannot be controlled by ventilation.

+ CLOTHING -

Avoid clothing with tight constrictions at neck and wrists and always wash separately from normal family clothing.

+ SKIN IRRITATION -

Wear gloves when handling. If irritation is experienced it can be lessened or sometimes prevented by rinsing under cold running water before applying soap when washing.

+ BARRIER CREAMS -

Can help some skin types but are a matter of personal choice.

+ EYE PROTECTION -

Always use when cutting or sanding plaster boards. If dust enters eye then wash with plenty of clean water.

+ PERSONAL HYGIENE -

Always maintain adequate standards of personal hygiene. If gypsum dust is swallowed wash out mouth and drink plenty of water. There are no biological hazards from the intake of Gypsum dust.

+ WASTE DISPOSAL -

The material is not hazardous and should be disposed of in accordance with local regulations at a tip designated for building products.

+ EMERGENCY ACTION -

If excessive irritation of the skin, eyes or throat persist then consult with a doctor immediately.

+ ADDITIONAL INFORMATION -

H & SE guidance notes: EH40

+ EXPOSURE LIMITS -

Total inhalable dust = 10mg/m^3 hour time weighted averageRespirable dust = 5mg/m^3 hour time weighted average

APPENDIX 3C

EXTRACTS FROM SUPPLIER INFORMATION

ALUMINIUM PROFILES

+ FIRE -

The product does not constitute a fire hazard, although packing materials do constitute a fire risk if exposed to heat.

+ STORAGE -

Avoid metal being dragged over metal which may create swarf and damage significant surfaces. Ensure that cut ends are kept away from personnel and that the section do not protrude into access or walk-ways.

+ RESPIRATORY PROTECTION -

With normal cutting and drilling airborne dust is not created.

+ CLOTHING -

Avoid swarf granules collecting in clothing and wear overalls to prevent swarf penetrating to skin. Always wash separately from normal family clothing.

+ SKIN IRRITATION -

Wear gloves when handling to prevent laceration from cut ends. Materials are supplied with "soft" ends to prevent accidental damage. However materials processed at site will have cut ends which must be handled with care.

+ BARRIER CREAMS -

Should not be required.

+ CONDUCTION -

Avoid contact with overhead wires and electrical installations during handling. Aluminium is a very good conductor.

+ EYE PROTECTION -

Always use when cutting or drilling aluminium profiles. If swarf enters eye then wash with an eye bath. Consult doctor immediately.

+ PERSONAL HYGIENE -

Always maintain adequate standards of personal hygiene. If aluminium swarf is swallowed wash out mouth and consult a doctor immediately.

+ WASTE DISPOSAL -

The material is not hazardous and should be disposed of in accordance with local regulations at a tip designated for building products.

+ EMERGENCY ACTION -

If laceration of the skin occurs, treat using standard first aid, if swarf is swallowed or enters eyes, consult with a doctor immediately.

APPENDIX 3D

EXTRACTS FROM SUPPLIER INFORMATION

STEEL SECTIONS

+ FIRE -

The product does not constitute a fire hazard.

+ STORAGE -

Avoid metal being dragged over metal which may create swarf Ensure that cut ends are protected and do not protrude into access or walk-ways.

+ RESPIRATORY PROTECTION -

With normal cutting and drilling airborne dust is not created.

+ CLOTHING -

Avoid swarf granules collecting in clothing and wear overalls to prevent swarf penetrating to skin. Always wash separately from normal family clothing.

+ SKIN IRRITATION -

Wear gloves when handling to prevent laceration from cut ends. Materials are supplied with "soft" ends to prevent accidental damage. However materials processed at site will have cut ends which must be handled with care. The sections may be covered with residual oils from the manufacturing process. Avoid contact with skin.

+ BARRIER CREAMS -

Can help some skin types but are a matter of personal choice.

+ CONDUCTION -

Avoid contact with overhead wires and electrical installations during handling. Steel is a very good conductor.

+ EYE PROTECTION -

Always use when cutting or drilling aluminium profiles. If swarf enters eye then wash with an eye bath. Consult doctor immediately. Take care when cutting away strapping which binds steel profiles as it may cause injury as the tension is released. Sparks from mechanical cutting may be hazardous.

+ PERSONAL HYGIENE -

Always maintain adequate standards of personal hygiene. If steel swarf is swallowed wash out mouth and consult a doctor immediately.

+ WASTE DISPOSAL -

The material is not hazardous and should be disposed of in accordance with local regulations at a tip designated for building products.

+ EMERGENCY ACTION -

If laceration of the skin occurs treat using standard first aid, if swarf is swallowed or enters eyes, consult with a doctor immediately.

APPENDIX 3E

EXTRACTS FROM SUPPLIER INFORMATION

PVC SECTIONS

+ Although not hazardous in normal use the hazards resulting as a consequence of cutting or fire in relation to PVC are significant. The full information is given on the attached data sheet provided by Hydro Polymers see APPENDIX 4

OTHER ASSOCIATED PRODUCTS

Logika 3000/5000/6000 can incorporate many other products subject to specification, for information on these items please consult the supplier/manufacturer providing these materials.:

DOOR PANELS, IRONMONGERY, GLASS, BLINDS, ELECTRICAL ITEMS, WALL COVERINGS, VENEERED PANELS, PERIMETER SEALS ASSOCIATED WITH EXISTING FLOOR/CEILING VOIDS, ADHESIVES, FIXINGS, etc.

IF IN DOUBT PLEASE CONTACT OUR TECHNICAL DEPARTMENT:

TEL: 01440 764897FAX: 01638 583988

APPENDIX 3F

GENERAL METHOD STATEMENT FOR THE INSTALLATION OF LOGIKA PARITITON SYSTEMS.

This statement should be read in conjunction with the attached Technical Manual and COSSH Safety Information.

Logika provides this statement on the basis that Logika Partitions LIMITED is a "supply only" company and that the information detailed below is for incorporation within an overall "Method Statement" prepared by the individual sub-contractor who has been contracted to install our products (The installing Sub Contractor).

Logika Partitions LIMITED operates a policy of training for all our products and it assumed that the sub contract installation team has undergone training either at our own premises, or by way of on-site training supervised by Logika personnel. Subject to the complexity of an intended installation Logika Partitions LIMITED may require the sub contract installation team to attend detailed training at our premises to cover specific construction elements where site program OR other constraints prevent adequate training of the sub contactor installation team.

It is assumed that sub contractor responsible for the installation of our products has appointed a suitably qualified or experienced Site Supervisor who is conversant with the relevant installation issues of our products, and is familiar with all relevant standards and codes of practice for the carrying out of the installation. The Site Supervisor will be ultimately responsible for ensuring that all the requirements of this Method Statement are met and that the "As built" assembly is consistent with the clients' layout and performance requirements.

Description of Works

1.1 The installation of Logika 3000, Logika 5000 partition systems and the Logika 6000 framing system is carried out by an approved installer and subsequent installation of glass by Logika Glazing Ltd (See separate Method Statement for Logika Glazing Ltd in Appendix 3G attached).

2. Sequence of Operations

2.1 At commencement The Installing Sub Contractors will appoint a Site Supervisor who will have ultimate responsibility for safety and coordination of material deliveries, off-loading and site access.

2.2 The Installing Sub Contractor should arrange for adequate access to the site by our delivery vehicle and for unloading equipment and suitably trained personnel for the unloading of our materials. It is recommended that veneered doors are delivered after the initial phase of installation has been completed to avoid damage and unnecessary handling.

2.3 The Installing Sub Contractor will provide labour for safely distributing the materials from the unloading point to a location of safe, secure and dry storage close to the point of installation.

2.4 The Installing Sub Contractor will set up a safe working area for preparation of the Logika 3000/5000/6000 materials, and provide adequate lighting, ventilation and guarding for any equipment used for the preparation of the materials.

2.5 Where required The Installing Sub Contractor will provide protection to existing surfaces.

2.6 All operatives engaged in the manoeuvring of the materials shall be fully competent and aware of the risks associated with the manual handling aspects of the task.

2.7 It is in the interest of safety during handling and to limit damage to completed framing by following trades, that the partition is installed as late a possible in the site programme and when the number of other trades operating in the vicinity of the installation point or along the distribution route between the off loading area and the installation point is at a minimum. In particular partition installation should be programmed to avoid areas where :

i. Flooring or screeding is being laid.

ii. Ceilings are incomplete.

iii. The building envelope is not fully sealed against damp and moisture.

2.8 Installation of the Logika 3000 / Logika 5000 partition system/Logika 6000 Framing System shall be carried out in accordance with Logika installation and Technical Manual in conjunction with any special details shown in any appendix for Project Specific Details.

2.9 Refuse bags of the correct type shall be provisioned at locations within the work area to enable ease of access. The Site Supervisor shall ensure that waste and debris levels are continually monitored and cleared away at the earliest opportunities.

2.10 Where debris and other materials are transported to alternative floors for storage or removal via a lift or hoist care will be taken so as to avoid exceeding the safe working load of the lift or hoist.

2.11 When debris is being cleared, care shall be taken to ensure that dust and noise is kept to a minimum thereby reducing the disturbance to any of the buildings current occupants. The Installing Sub Contractor will provide refuse bags of the correct type that shall be provisioned at locations within the work area to enable ease of access. The Site Supervisor shall ensure that waste and debris levels are continually monitored and cleared away at the earliest opportunities.

2.12 If any large items or lengths of waste material (over 2 metres long) are required to be removed then two persons shall undertake the task with the lead person co-ordinating the lift, whilst maintaining a high level of visual awareness for obstructions and pedestrian movements.

2.13 If due to space restrictions, the siting of a refuse skip is impossible, The Installing Sub Contractor will arrange to remove the bagged waste and dispose of it in safe manner by transferring the waste to licensed tips accepting builders waste. This method of removing rubbish will be supported, in extreme circumstances only, by the removal and transfer of non-hazardous waste and debris via the Main Contractors vehicles to a licensed tip accepting Builders waste with any transfer documentation being retained by the parties concerned.

2.14 When work is completed all protective coverings shall be removed and all areas left clean and tidy.

3. SUPERVISION CONTROLS AND MONITORING

3.1 All work will be directly controlled by the Site Supervisor, who will ensure that the safe means of working, as given by this method statement are complied with.

4. OPERATOR TRAINING AND PLANT

4.1 All operatives employed or sub-contracted to The Installing Sub Contractor will be experienced and trained in the work that they are undertaking. Further training will be provided by Logika Partitions on request from The Installing Sub Contractor.

4.2 Plant and machinery will be operated only by those competent and adequately trained in its use.

4.3 Power tools will be checked at regular intervals and a visual inspection carried out before use. Power tools will be 110 volts or less and shall be subject to portable appliance testing at 3 monthly intervals.

5. SAFETY OF THIRD PARTIES

5.1 The Installing Sub Contractor will ensure all employees and sub-contractors will be made aware of any risks their work can impose on others in the vicinity. Work will only be undertaken so as to minimise these risks or when adequate protection is in place.

5.2 The Site Supervisor will liaise with the employees and sub-contractors to ensure that protection against all potential risks concerned with this activity is adequate.

6. ENVIRONMENTAL CONTROLS

6.1 Every effort will be made to keep noise, dust and waste levels to a minimum, and to ensure that they do not cause a hazard or become a nuisance to others. Working areas will be tidied regularly and waste removed to a temporary storage area provided.

7. PERSONAL PROTECTIVE EQUIPMENT

7.1 All operatives engaged on this operation shall be provided with appropriate personal protective equipment where necessary, operatives involved with the task contained within this method statement shall wear suitable hand, eye and respiratory protection and safety footwear when necessary.

7.2 All operatives shall be made aware of first-aid and emergency procedures on their arrival to site.

8. NON-STANDARD ACTIVITIES

8.1 Should any non-standard activities arise out of these operations they shall be addressed immediately on site by the trade foreman who will notify head office management immediately who will advise on the preparation of any required additional risk assessments prior to the works commencing.

APPENDIX 3G

GENERAL METHOD STATEMENT FOR A GLAZING INSTALLATION BY LOGIKA GLAZING LIMITED (LGL)

1. DESCRIPTION/SCOPE OF THE WORKS

The works contained within this method statement consist of:

1.1 **Handling glazed panels from the delivery point to the point of installation** through areas of the premises that may be occupied by other contractors or by clients personnel

1.2 **The installation of glazed panels** and glass doors into a pre-installed framing system.

1.3 (where applicable) **The installation of blinds** or **The application of Manifestation film.**

2. Pre-delivery and Installation requirements.

2.1 It is the installing sub contractors' responsibility to arrange for the preparation holes to accommodate raised floor coffer boxes for glass doors on floor springs. Where this is delegated to LGL the installing sub contractors must ensure that the location of the proposed coffer boxes is not impeded by any pre-existing cabling, paperwork or ductwork and that the floor construction is adequate to support the coffer box and weight of the installed glass door.

2.2 It is the installing sub contractors' responsibility to ensure that (where applicable) all free issue ironmongery for glass doors is available to LGL for installation at least 24 hours ahead of the agreed commencement date for glass installation. NOTE: Any delay to installation due to the late arrival of "free issue" glass door ironmongery will be charged at LGL's standard day work rates.

3. ACCESS for DELIVERY and DISTRIBUTION OF GLASS PANELS

3.1 The installing sub contractor should arrange for adequate access to the site by the delivery vehicle and for unloading equipment and suitably trained personnel for the unloading of our materials to the DELIVERY POINT

3.2 THE DELIVERY POINT is a location where glass sheets can be safely stored during the time it takes for distribution of the glass panels to the INSTALLATION POINT. The installing sub contractor will supervise and arrange all aspects of the unloading procedure and ensure that adequate provision is made for the safe handling of the glass sheets from the delivery location to the point of installation by LGL.

3.3 It is the installing sub contractor responsibility to arrange for adequate lifting equipment to lift glass delivered on "A" frames onto the floor level of the INSTALLATION POINT. Where this is not possible then provision must be made for clear access to either a hoist or lift of adequate capacity and dimensions to accept the largest glass panel size being delivered.

3.4 Where there is a high risk of damage from following trades, It is recommended that Glass doors are delivered and installed after the initial phase of installation has been completed to avoid damage by following trades and unnecessary replacement of glass doors.

3.5 Access routes to the INSTALLATION POINTS concerned will be need to be clear, free of any obstructions and level so as to allow glass panels to be distributed using wheeled trolleys designed to safely transfer panels from the off-loading point to the point of installation.

3.6 Manual transfer of glass from the point of delivery to the installation location should be avoided if at all possible.

3.7 The installing sub contractor should arrange for all other trades and sub contractors to be aware of the movement of glass and arrange that the routes between the off-loading point and installation point to be vacated of all other trades that could create a risk of damage or breakage to the glass as it is being transported between the delivery point and the installation point.

3.8 The Installing Sub contractor will arrange for the positioning of suitable signage and hazard safety tape to indicate the access route where the risk of damage to the glass by other trades is considered to be high risk.

3.9 The Installing Sub Contractor will arrange for adequate lighting for both the Access route and the Installation points so as to enable the safe handling of glass and to allow proper cleaning of the glass following installation.

4. SEQUENCE OF OPERATIONS

4.1 At commencement our working on-site foreman will liaise with The Installing Sub Contractors Site Supervisor who will have ultimate responsibility for safety.

4.2 Where necessary, prior to the work commencing The Site Supervisor will arrange for suitable floor protection shall be laid with any paint work or fragile surfaces adequately protected with jointed coverings along any access routes that glass will be transported.

4.3 Where the ONLY access route is also a fire escape route LGL recommended that the installation should take place when the building is unoccupied or as other wise agreed with The Installing Sub Contractors Site Supervisor.

4.4 Where the access route to one of at least two fire escape routes LGL will ensure that only one escape route is be used for the transport of glass panels from the delivery point to the installation location point.

4.5 All operatives engaged in the manoeuvring of the glazing shall be fully competent and aware of the risks associated with the manual handling aspects of the task.

4.6 Glass will be installed in accordance with the recommendations of the glazing frame manufacturer. It is the responsibility of The Installing Sub Contractors Site Supervisor to ensure Logika Glazing Ltd is provided with all necessary information relevant to the installed framing system.

4.7 Clear and level access must be provided to both faces of the glazing to enable safe installation of the glass. Where glass is being installed at high level (e.g. in an Atrium location) The Installing Sub Contractors Site Supervisor will arrange for suitable scaffolding and access equipment complying with the relevant safety standards to be provided for the exclusive use of Logika Glazing Ltd. operatives.

4.8 It is in the interest of safety during handling and to limit damage to completed glazing by following trades, that the glass should be installed as late a possible in the site programme and when the number of other trades operating in the vicinity of the installation point or along the Access route between the off loading area and the installation point is at a minimum.

4.9 In the interests of safety glass installation should not be programmed to occur at the same time as furniture is being fitted or manoeuvred in the installation area or along the Access Route .

4.10 Film applied Manifestation and the glass will be cleaned by LGL. Any follow-up cleaning should only be carried out after the film has FULLY cured. See Section 4 below

4.11 The Installing Sub Contractors Site Supervisor will be responsible for the inspection and signing off of completed areas and for arranging protection of completed works.

4.12 Where installation is phased over a number of visits or locations each completed phase will be inspected and signed off by the Installing Sub Contractors Site Supervisor and will arrange each completed phase to be protected from following trades.

4.13 When work is completed all protective coverings shall be removed and all areas left clean and tidy.

5. Film Applied Manifestation

5.1 Film applied manifestation MUST be installed in a dust free atmosphere to avoid contamination of the adhesive bond. The installing subcontractors Site Supervisor will ensure that all dust creating activities are ceased during the period of film application and for at least 24 hours “DRYING TIME”

5.2 ‘CURING TIME’ will be approximately 30 days, whilst thicker grades of film could increase the drying period. Glazing should not be touched or washed during this period.

5.3 Where an installation of Double glazing incorporates film manifestation within a double glazing void, the a film must be allowed at least 24 hours “DRYING TIME” before the second layer of glass is installed.

6. Blind installation

6.1 Blinds MUST be installed in a dust free atmosphere to avoid contamination of the glazing void in double glazing. The installing subcontractors Site Supervisor will ensure that all dust creating activities are ceased during the period of blind installation until the glazed modules is fully closed by the second panel of glass.

6.2 Cleaning of the Blinds in a single glazed configuration will the responsibility of The Installing Sub Contractor.

7. Waste Disposal

7.1 Refuse bags of the correct type shall be provisioned at locations within the work area to enable ease of access. The Site Supervisor shall ensure that waste and debris levels are continually monitored and cleared away at the earliest opportunities.

7.2 The Site Supervisor will designate a safe disposal point for any glass breakages and will liaise with LGL for the safe disposal of any broken glass.

7.3 Where glass is broken by following trades or non-LGL personnel it is the responsibility of that trade or persons Supervisor to arrange for the safe collection and disposal of any broken glass fragments.

7.4 Where debris and other materials are transported to alternative floors for storage or removal via lift or hoist care will be taken so as to avoid exceeding the safe working load of the lift/hoist.

7.5 When debris is being cleared, care shall be taken to ensure that dust and noise is kept to a minimum thereby reducing the disturbance to any of the buildings current occupants.

7.6 If any large items or lengths of waste material (over 2 mtr long) are required to be removed then two persons shall undertake the task with the lead person coordinating the lift, whilst maintaining a high level of visual awareness for obstructions and pedestrian movements.

7.7 If due to space restrictions, the siting of a refuse skip is impossible, arrangements will be made to remove the bagged waste and dispose of it in safe manner by transferring the waste to licensed tips accepting builders waste.

8. SUPERVISION CONTROLS AND MONITORING

8.1 The Installing Sub Contractors Site Supervisor will have ultimate responsibility for safety and supervision.

8.2 All work carried out by Logika Glazing Ltd will be directly controlled by the LGL on-site trade foreman, who will ensure that the safe means of working, as given by this method statement are complied with.

8.3 Additional supervision will be on hand from the offices of Logika Glazing Ltd when required.

9. OPERATOR TRAINING AND PLANT

9.1 All operatives employed or sub-contracted to LGL will be experienced and trained in the work that they are undertaking. Further training will be provided if found to be required.

9.2 Plant and machinery will be operated only by those competent and adequately trained in its use.

9.3 Power tools will be checked at regular intervals and a visual inspection carried out before use. Power tools will be 110 volts or less and shall be subject to portable appliance testing at 6 monthly intervals.

10. SAFETY OF THIRD PARTIES

10.1 All LGL employees and sub-contractors will be made aware of any risks their work can impose on others in the vicinity. Work will only be undertaken when these risks are minimised or adequate protection is in place.

10.2 The on-site trade foreman will liaise with the employees and sub-contractors to ensure that protection against all potential risks concerned with this activity is adequate.

11. ENVIRONMENTAL CONTROLS

11.1 Every effort will be made to keep noise, dust and waste levels to a minimum, and to ensure that they do not cause a hazard or become a nuisance to others. Working areas will be tidied regularly and waste removed to a temporary storage area provided.

12. PERSONAL PROTECTIVE EQUIPMENT

12.1 All LGL operatives shall be provided with appropriate personal protective equipment where necessary, operatives involved with the task contained within this method statement shall wear suitable hand protection and safety footwear when necessary.

12.2 All operatives shall be made aware of first-aid and emergency procedures on their arrival to site.

13. NON-STANDARD ACTIVITIES

13.1 Should any non-standard activities arise out of these operations they shall be addressed immediately on site by the trade foreman who will notify head office management immediately who will advise on the preparation of any required additional risk assessments prior to the works commencing.

APPENDIX 4
PVC INFORMATION SHEETS

LOGIKA PARTITIONS LIMITED. 7 Lime Grove Estate,
Falconer Road, Haverhill, Suffolk, CB9 7XU
TEL: 01440 764897 Fax: 01440703660

UPvc Components

1. INTRODUCTION

This publication outlines the precautions which should be taken in the handling of compositions made from vinyl chloride polymers (PVC) andco-polymers, and has been prepared in conjunction with the British Plastics Federation. The compositions are made from PVC polymers and/or co-polymers by blending with a variety of additives such as stabilisers, plasticisers, fillers, pigments etc. They should not be confused with PVC polymers which may require different precautions in handling. Further information on PVC polymers can be found in Hydro Polymers Limited publication "A Guide to the handling of PVC Resins". PVC compositions are described in several ways, the most common being:

Physical Form

Description

Powder PVC dry blend, powder blend, colour powder concentrate Pellet PVC granulate, pellet, compound, masterbatch, colour concentrate. Liquid/Paste PVC plastisol . organosol Dough/Jelly Hot melt compound (H.M C.) ,Extrusion Formed PVC

Additional Health and Safety information relating to specific compositions will be found in the appropriate technical literature.

2. POTENTIAL HAZARDS

2.1 Toxicity

2.1.1 Inhalation

2.1.1.1 Residual Monomer

The release of VCM from PVC compositions may occur into processing plant atmospheres such as in extrusion and moulding shops where it will only produce trace levels, very considerably lower than the limits quoted below. provided that simple ventilation is employed in areas where compositions are stored, handled and processed.

Since there is accepted evidence linking the inhalation of high concentrations of VCM over prolonged periods with carcinogenic effects, precautions are necessary to avoid inhalation exposure.

An EEC Directive' has been issued on the protection of the health of workers exposed to vinyl chloride monomer. This Directive limits VCM to a technical long term limit value (TLTLV) of 3ppm, the reference period being the year, allowing that wherever practicable, exposures should be brought as near as possible to zero Concentrations. The rigorous monitoring and control measures of the Directive do not apply to the handling of compositions, although it is recommended that the exposure requirements should be met. Analytical techniques to measure VCM levels in the atmosphere can be found in a manual published by the Chemical Industries Association.

Compositions based on vinyl chloride/vinyl acetate co-polymers also contain trace residues of vinyl acetate which, although much less volatile than VCM, will be slowly released to the surrounding atmosphere. There is no evidence of carcinogenic effects from vinyl acetate at any concentration. The provision of adequate ventilation, as indicated above for VCM will serve to minimise vinyl acetate concentration in the working atmosphere also.

2.1.1.2 Powder and Dust

PVC pellets, dice, pastes and dough's do not present any inhalation hazards because of their physical form. However, the handling of PVC powder compositions or cutting/grinding of PVC extrusions may give rise to airborne dust concentrations and steps should be taken to avoid inhalation of such airborne material. PVC compositions may contain toxic stabilisers pigments etc., and such compositions may be harmful if Inhaled Notice of the presence of such toxic ingredients will be found on the bags or other containers In which the material is supplied where appropriate.

PVC dust has hitherto been considered a "nuisance dust" (defined as producing no irreversible change in living tissues when exposures are kept under reasonable control, e.g. to a hygiene standard of 10mg. per cubic metre). This classification has been supported by a number of surveys of workers who have had pro-longed exposure to PVC dust.

However, some recent papers published in medical journals have suggested that PVC dust affected health through lung damage. This was so different from the industry observations that the Edinburgh Institute of Occupational Medicine (IOM) was commissioned to carry out a major study of the lung health of past and present employees at a major UK factory where PVC has been manufactured for thirty five years.

The IOM has reported that there is no evidence of serious lung damage from inhalation of PVC dust. The IOM did detect a small but measurable effect on the ventilatory capacity of lungs related to the degree of exposure to PVC dust and to cigarette smoking habits. The IOM also found some slight abnormalities in some chest X-rays. They concluded that "there is no evidence that PVC dust has caused serious illness among the work force although the possibility of a rare idiosyncratic response to the dust cannot be excluded. In the UK, the Government Health & Safety Executive (HSE) have issued a Guidance Note "Control of Exposure to PVC Dust" (1982) in which they draw attention to possible health risks which could result from exposure to PVC dust and in which they recommend exposure limits.

The HSE Guidance Note has made the following recommendations for control limits: -

a) Exposure to PVC dust should be kept as low as is reasonably practicable.

b) In any case exposure should not exceed 10 mg/m3 for total PVC dust in air and 5 mg/m3 for respirable dust in air.

The Guidance Note gives details of methods of sampling and measurement. The need for good industrial hygiene and compliance with the HSE control limits are emphasised. The exposure of operators to

PVC dust should be minimised by the proper design of storage and handling facilities, by proper works practice, by good housekeeping and by the use of suitable protective clothing including face masks capable of excluding very fine particles (ref. 7). The use of efficient and appropriately sited ventilation and extraction systems will enable low atmospheric concentrations to be maintained. (See Section 3.1 Health Considerations).

2.1.2 Ingestion

Some PVC compositions may contain certain ingredients which are toxic if ingested. This particularly applies to some of the stabilising and pigment systems used. For this reason the ingestion of PVC compositions may be harmful. To a degree, the risk is related to the physical form of the PVC composition. Thus any toxic ingredients which might be present in a pelletized composition are not readily extracted while in a powder blend, or more particularly in colour powder concentrate, the risk is greater. The presence of a toxic ingredient in a PVC composition will be indicated by cautionary notices on containers. Appropriate protective measures are given in sections 3 and 4.

2.2 Dermatology

PVC polymers and co-polymers are not normally considered to be skin irritants or sensitizing agents in their own right. PVC compositions in powder form can have an abrasive effect on the skin, particularly at collars and cuffs, and this can give rise to dermatitic problems if sensitizing ingredients are present in the composition. The presence of an ingredient in a PVC composition which is known to have an irritant or sensitizing effect in contact with the skin will be indicated in the technical literature or label referring to that specific grade. Irrespective of whether special dermatitic hazards are known to exist, it is recommended good practice that all persons handling PVC compositions should wash exposed areas after work and before eating (see section 5).

2.3 Fire

2.3.1 Ignition and burning characteristics

Most PVC compositions, under normal conditions of storage and use, are not flammable, but in common with other organic materials they can be consumed by fire. The ease with which compositions will burn under these circumstances will depend on their composition, but in general, ease of burning will increase with increasing plasticiser content. Some plastisol compositions contain flammable diluents, which can constitute a fire hazard. This information will be given in the appropriate technical data sheet, and containers marked accordingly. When PVC compositions are stored in palletised sacks, it must be recognised that the packages and the pallets themselves are a fire risk and are generally a much more likely route for rapid fire spread.

2.3.2 Decomposition products

The major products of combustion/decomposition of PVC compositions are carbon dioxide, carbon monoxide and hydrogen chloride. Additionally, many other minor decomposition products have been identified. Carbon monoxide and hydrogen chloride are toxic with threshold limit values - 50 ppm and 5 ppm respectively, and inhalation must be avoided. In addition hydrogen chloride is corrosive in the presence of moisture.

The nature and proportion of such decomposition products will vary according to the formulation. though there will not normally be additional hazard, toxic or corrosive, to that associated with carbon monoxide and hydrogen chloride. It should be noted that Hy-vin PVC compositions possess adequate stability for the intended application and therefore decomposition resulting in the evolution of significant quantities of the above gases does not occur under typical processing conditions. The action to be taken in the event of a fire is given in Section 3.2.

2.4 Dust

PVC granulated compositions do not, under normal conditions of storage and use, constitute a dust hazard. However the handling of PVC powder compositions can give rise to air-borne dust concentrations and reference should be made to section 2.1.1.2. In addition. some PVC powder compositions and colour powder concentrates can contain toxic ingredients such as heavy metal salt stabilisers and pigments, which may be harmful if inhaled. See Section 3.1.1. It is possible that dust may be formed during grinding of scrap PVC materials, in which case the same considerations will apply as to powder compositions. See Section 2.1.1.2.

For advice on good housekeeping practice and avoidance of dust, contact your local factory inspector.

2.5 Explosion

2.5.1 PVC Powder Compositions

PVC polymers are rated as a low order dust explosion risk, as defined in work carried out by the Fire Research Station, and PVC powder compositions would be expected to be therefore also of low risk .

2.5.2 PVC Plastisol

Some PVC plastisols may give rise to concentration of vapours which are flammable and potentially explosive.

3. RECOMMENDED PRECAUTIONS FOR

TRANSPORTATION, HANDLING AND STORAGE.

3.1 Health Considerations

3.1. 1 Powders

PVC powder compositions can contain toxic ingredients and particular attention should be paid to minimising exposure to such materials. However for all PVC Powder compositions the following precautions should be adopted:

Silos and bulk containers should be sampled by means of a long handled scoop to avoid exposure to air-borne ingredients.

When it is necessary to enter the confined space of a bulk container, silo, etc., there is a risk of exposure to concentrations of VCM above the Hygiene Standard 1, and all requirements as Stated in the section relating to

"Entry into Confined Spaces" of the Vinyl Chloride Code of Practice for Health Precautions must be followed. Reference is also made to section 30 of the Factories Act 1961 'g and TDN 47 "Entry into Confined Spaces: Hazards and Precautions". Suitable extraction and protective the clothing should be available in all areas where a person is exposed to PVC dust during handling or processing. All extraction facilities should be positioned so that they exhaust away from the natural working environment The exhaust air should be filtered so that fine dust does not pass into the atmosphere.

Dust masks (fitted with fine particle filter pads), eye protection, overalls and gloves should be used when PVC powder compositions are being handled. In automatic handling all reasonable pre-cautions should be taken to prevent and contain dust.

Exposure to dust should be minimised at all times by maintaining a good standard of housekeeping. Washing and showering area should be provided for workers who have been exposed to dusts particularly powder compositions containing toxic ingredients. Also arrangements should be made for collection of contaminated clothing. Smoking, eating and drinking should be prohibited in areas where compositions containing toxic ingredient are being handled, and workers should be encouraged to wash and don clean clothing before eating. The advice of the local HM Factory Inspectorate should be sought as necessary.

3.1.2 Granulate and extrusions

No additional precautions are necessary unless stated on a label or in the individual technical data sheet, other than those concerned with subsequent processing (see section 4).

3.1.3 Pastes and Doughs

These often contain diluents which are flammable and should be stored in well ventilated conditions as advised by the local Fire

Authority.

Where a person is handling pastes or doughs suitable protective clothing, including eye protection, should be worn and the area ventilated.

3.2 Fire Fighting Precautions

Most available fire extinguishers are effective in fighting fires involving PVC, although due note should be taken of the particular situation (e.g. when live electrical equipment is nearby) which may restrict the use of some media. Advice should be sought from the local Fire Authority as to the most suitable types of extinguisher to be installed. In the event of a small localised fire, immediate action should be taken by personnel in the vicinity using available fire extinguishers. Care should be taken to avoid inhalation of decomposition fumes. When the fire has been extinguished ventilation should be increased to clear the fumes as quickly as possible. It is important to advise the fire fighting personnel, including the fire brigade, to wear acid resistant protective clothing and full facemasks. The fire brigade should also be notified that PVC compositions are involved. Suitable breathing equipment should be worn by fire fighters exposed to the products of combustion. Qualified medical aid should be sought in the event that anything more than very temporary irritation to the skin, eyes, throat, etc., is experienced. As highly corrosive hydrogen chloride is given off during the combustion of PVC, directly affected areas should be cleaned down to remove corrosive decomposition on equipment etc., as soon as possible.