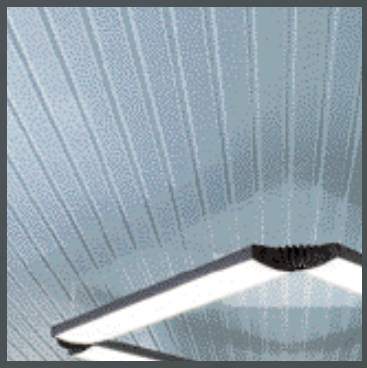
UltraGRID™

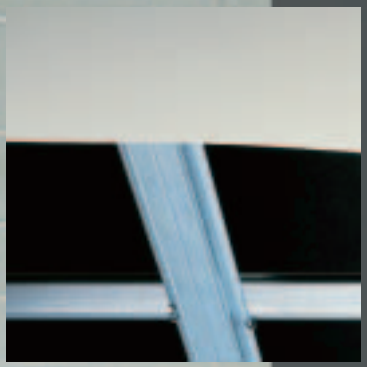
FlairLINE LINEAR

XtraSPAN ***COVERFAST***

CEILING **FURRING**

CEILING SYSTEMS





HADLEY GROUP

CONTENTS

The Hadley Group is one of Europe's leading manufacturers of cold rolled sections and allied products.

Operating from purpose built premises in the heart of the industrial West Midlands in the United Kingdom. **The Hadley Group** of companies are dedicated to the provision of matchless standards of service, quality, innovation and technical expertise.

The integration of advanced research and development with in-house tool manufacture and the construction of its own rolling machines has earned **The Hadley Group**, its reputation as a major force in cold roll formed technology.

Components designed and engineered by companies within **The Hadley Group** are manufactured for the use in all types of industry from automotive, construction through to aerospace.

Advanced computer aided design technology is used in the development and production of a wide range of products setting high standards of performance and reliability.

Inspired by this dedication to technical innovation and high standards of quality and service we have undertaken the manufacture of a range of high quality ceiling systems for use in construction projects throughout the world, our aim is to provide the specifier and contractor with full technical and product support.

HADLEY GROUP

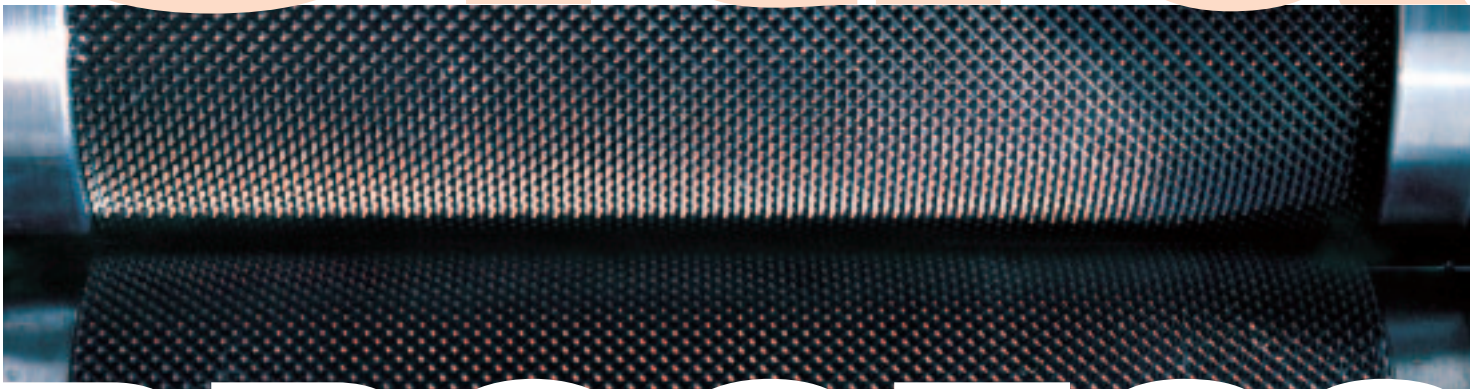
OUR MISSION STATEMENT:-

"WE WILL EXCEED OUR CUSTOMERS EXPECTATIONS BY WORKING TOGETHER PROFITABLY TO IMPROVE QUALITY AND SERVICE THROUGH INVESTMENT IN PEOPLE AND TECHNOLOGY'.

SHAPING THE FUTURE IN METAL

www.hadleygroup.co.uk

the Ultra PROCESS



The flexibility of the cold rolled forming process has allowed the Hadley Group to adopt a particular design philosophy. This philosophy enhances the flexibility of the process to produce an optimised product.

The optimum design for cold rolled steel product can be one that satisfies all the aspirations of both the customer and the manufacturer.

These new optimised products are achieved by modifying the shape and/or the surface characteristics of the material incorporated in the profile.

The design philosophy has enabled the Hadley Group to obtain the maximum potential from the material incorporated in the profile. An example of this design philosophy can be found within the development of the UltraSTEEL™ process.

The UltraSTEEL™ process is a major technical breakthrough and can be developed for use on virtually any cold roll formed section or product.

UltraSTEEL™ is an internationally patented method of altering the surface characteristics of roll formed steel in strips resulting in stronger section.

Cold formed sections or products which have been modified by the UltraSTEEL™ process, can therefore be more cost effective.

STEEL

DEFINITION

The UltraSTEEL™ process involves working steel in strips with two mating rolls, which produce a dimpled surface and ribbing effect across the surface of the material.

During the process, the effective thickness of the material is increased to that of the original thickness plus that of the ribbing.

This is achieved by stretching the form into material and not a result of folding in the ribs, which would require extra material.

THE THEORY

Since the UltraSTEEL™ process involves working steel in strips with two mating rolls, which, produce a dimpled surface and ribbing effect across the surface of the material. The load carrying performance and therefore strength of a cold rolled formed product would be increased.

The effects of the process can be divided into two theoretical headings, as follows:-

A. WORK HARDENING

B. STRESS DISTRIBUTION

WORK HARDENING

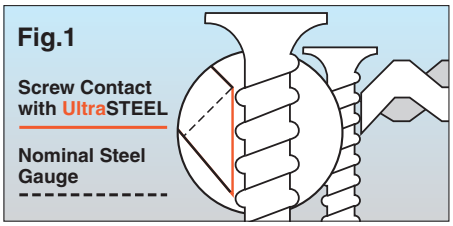
Within the UltraSTEEL™ process the total surface of the section has been strain hardened. Therefore when a load is applied to any element within the profile it will yield at a higher load.

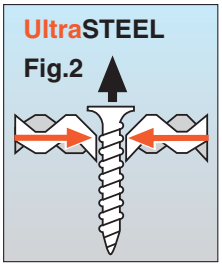
Cold working or strain hardening occurs when the steel is worked beyond its yield point. Once the load is removed, the unloading procedure is totally elastic. If further loading occurs after cold working, then the load cycle will follow the previous curve to a new failure point.

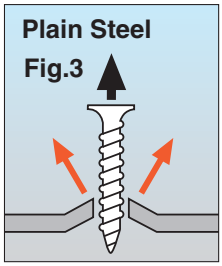
STRESS DISTRIBUTION

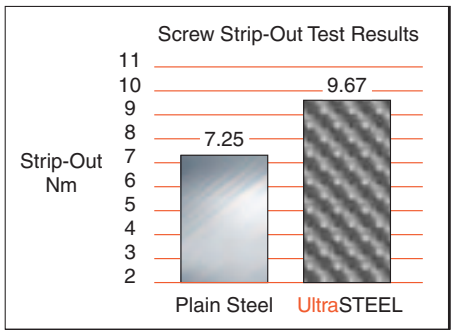
In all thin walled beams cold rolled formed sections the plate elements, which make up the section have a tendency to buckle locally under compression. Buckles form at lower loads the greater width to thickness ratio of the individual element. At greater widths, buckles form elastically causing a loss in overall compression strength of the plate. This is due to the outer portion, which is partly stabilised by the edge support.

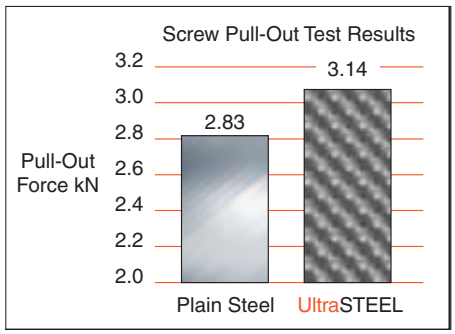
The UltraSTEEL™ process alters the stress distribution within the individual plate elements of the section and so increases the mode at which the element buckles. Therefore individual elements can carry more load.











INCREASED TENSILE STRENGTH

During the UltraSTEEL™ process the entire surface area of the steel strip is work hardened, therefore increasing the tensile strength of the finished section.

CONNECTION WITH MORE MATERIAL

The UltraSTEEL™ cross-section ensures that every screw is in contact with a material thickness greater than the nominal gauge of the steel. *(Fig. 1)*

RESISTANCE TO PULL-OUT

The location of screws within UltraSTEEL™ material creates inward pressure around the point of contact as a pull-out force is applied. *(Figs. 2-3).*

STRENGTH

The process allows the yield strength of cold rolled sections to be increased. The exact strength increase is determined by the use and efficiency of the section design.

SIMPLICITY

One of the main advantages of the process is its simplicity. The rolls can be easily added to an existing rolling machine, and therefore any type of cold rolled formed section can be manufactured using the UltraSTEEL™ process.

AESTHETICS

The surface finish reduces glare, hides any minor imperfections in the steel strip and gives the steel a distinctive look.

HANDLE-ABILITY

The treatment of the surface produces sections which can be handled with more ease and safety. In certain applications this can mean only one hand is needed where both hands are required for conventional products. Therefore thin gauge products are less likely to damage on site.

A further benefit of the process in use is the fact that UltraSTEEL™ allows easier assembly and better screw engagement on site.

MEMORY AND SPRING TENSION

Sections with their surface characteristics changed by the UltraSTEEL™ process have a greater ability to return to their original form after loading.

A comparison made between two samples from the same original coil indicates a 31% reduction in permanent deformation.

FIRE TEST IMPROVEMENT

Fire tests have shown an increase in performance with products produced from UltraSTEEL™.

ACOUSTIC PERFORMANCE

The dimpled surface of the section has been shown to reduce the levels of noise transmission through walls and ceilings. Several sound insulation tests were conducted with various Gypsum Boards.

COST BENEFITS OF THE UltraSTEEL™ PROCESS

Savings of up to 20% in material thickness can be achieved and therefore the primary benefit of the UltraSTEEL™ process is the reduction in raw material costs.

PATENTED PRODUCT

The UltraSTEEL™ process is an internationally patented product. It has been developed over several years of extensive research and development.

HADLEY GROUP

UltraGRID SYSTEM

3815Metric

3815Imperial

3824Metric

3824Imperial

3324Metric

3324Imperial

UltraGRID™ exposed ceiling grid systems are manufactured to the highest possible standard utilising the patented UltraSTEEL™ process.

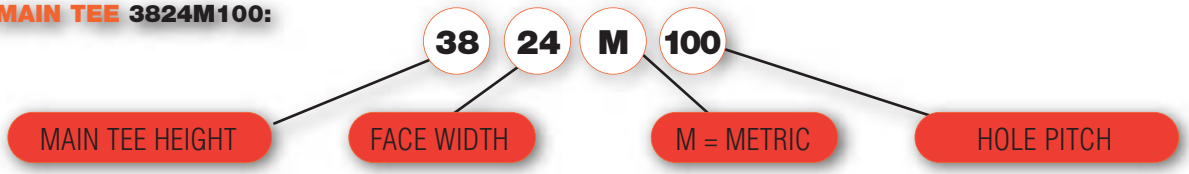
UltraGRID™ systems are suitable for installation in most applications and can accommodate a wide variety of lay-in ceiling tiles.

HADLEY GROUP

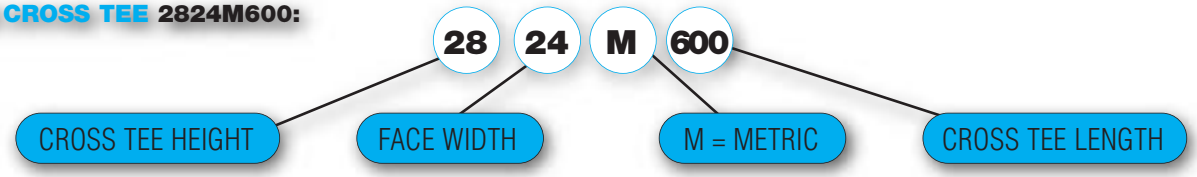
Product Reference

KEY TO UltraGRID PRODUCT REFERENCES:

EXAMPLE MAIN TEE 3824M100:



EXAMPLE CROSS TEE 2824M600:



MAIN TEE	CROSS TEE
3815 M 100	2824 M 400
3815 M 150	2824 M 500
3815 I 6	2824 M 600
	2824 M 900
3824 M 100	2824 M 1000
3824 M 150	2824 M 1200
3824 I 6	
	2815 M 400
3324 M 100	2815 M 500
3324 M 150	2815 M 600
3324 I 6	2815 M 900
	2815 M 1000
	2815 M 1200
	2815 I 24
	2815 I 48
	2824 I 24
	2824 I 48

INSTALLATION

UltraGRID™ ceiling components are manufactured to the highest quality standards, to ensure that these standards are reflected in the finished ceiling installation it is imperative that the system is installed in accordance with BS, EN and ASTM standards.

BENEFIT

Improved load carrying capacity is achieved through the use of the patented UltraSTEEL™ process and is further enhanced by the inclusion of stitching in the webb of both Main and Cross Tee's.

COMPOSITION & MANUFACTURE

Main and Cross Tee's are cold rollformed from Hot Dipped Galvanised Steel utilising the patented UltraSTEEL™ process and finished with prepainted capping. In addition to the benefits of the UltraSTEEL™ process both Main and Cross Tee's are double stitched for improved quality.

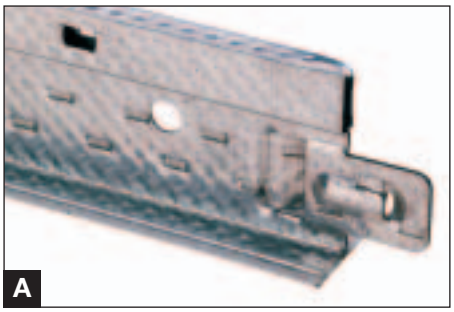
Cross Tee's are completed with high tensile steel clips to ensure a positive fit.

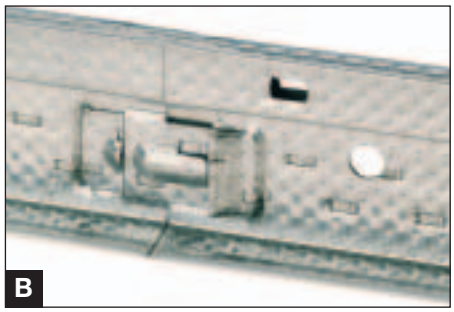
STEEL COMPONENTS

- MAIN TEE
- SINGLE TEE
- WALL ANGLE
- SHADOW ANGLE
- SUSPENSION ACCESSORIES:-
  WIRE
  BUTTERFLY CLIPS

SPECIFIER BENEFITS

Excellent appearance with strong clean lines. Highly flexible in terms of compatibility and integration with all types of services. e.g. Light Fittings, Air Conditioning Units, Sprinkler Systems etc.





HADLEY GROUP

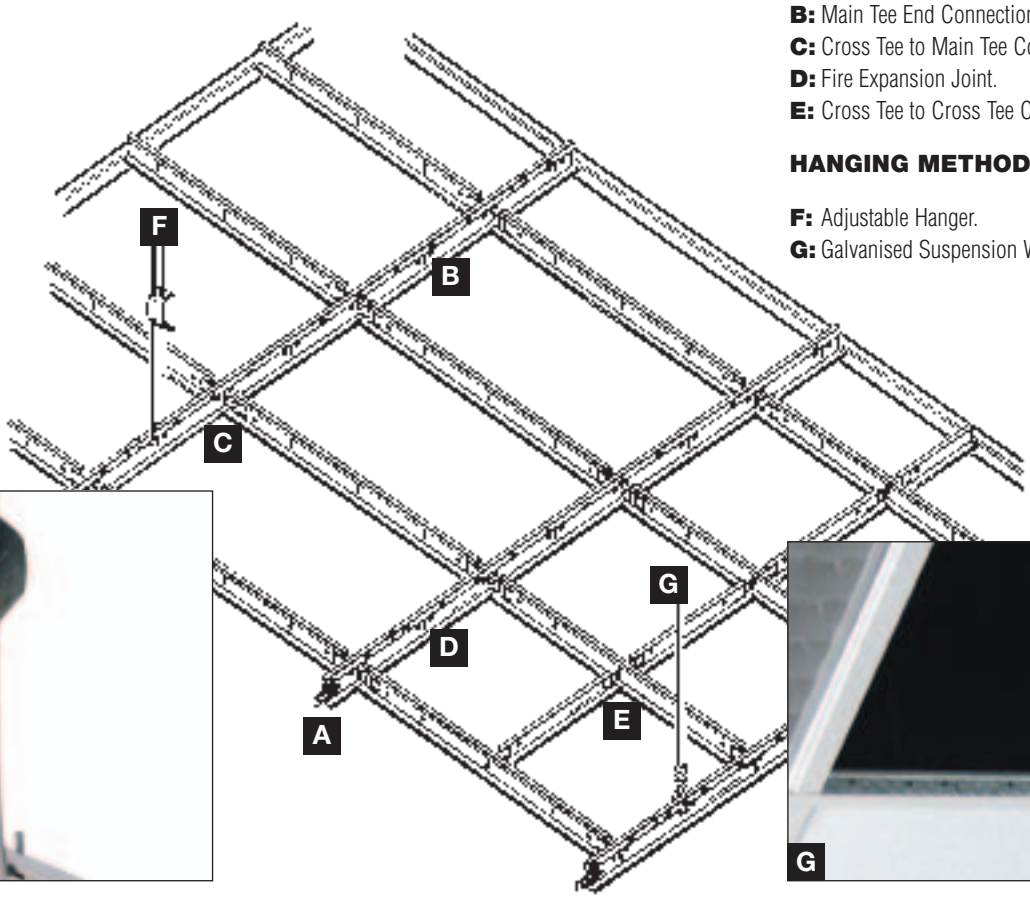
Construction

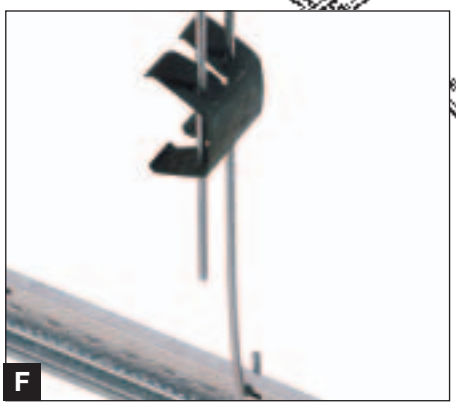
DRAWING/PHOTOGRAPH KEY

A: Main Tee End Connector detail.
B: Main Tee End Connection.
C: Cross Tee to Main Tee Connection.
D: Fire Expansion Joint.
E: Cross Tee to Cross Tee Connection.

HANGING METHODS

F: Adjustable Hanger.
G: Galvanised Suspension Wire.





FIRE RESISTANCE

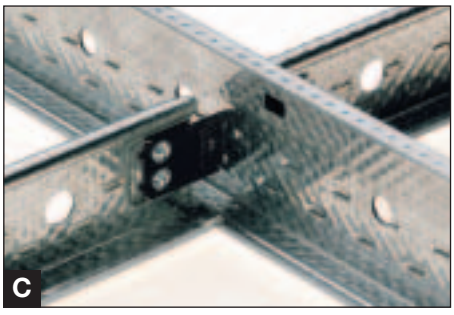
All fire resistance tests conducted upon UltraGRID™ ceiling profiles involve a loaded steel beam in-accordance with BS476: Part23: 1987 Clause 5.

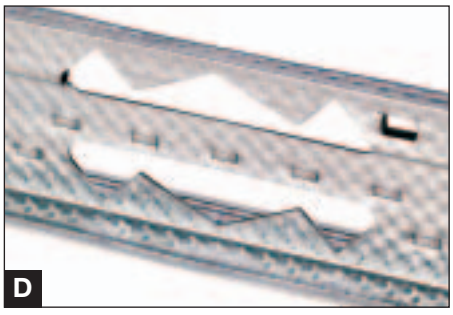
DURATION OF FIRE RESISTANCE

1.1 NOTE - DURATION OF FIRE RESISTANCE
The duration of the fire protection will depend upon the particular tile employed within the ceiling and the application of retaining clips.

STRUCTURAL PERFORMANCE

Performance is governed by the limit of deflection criteria, recommended in BS8290: Part2: 1991 and ASTM C636-96 for Suspended Ceilings. Performance specification of components and assemblies. Accommodation of light fittings requires extra hangers at corners.

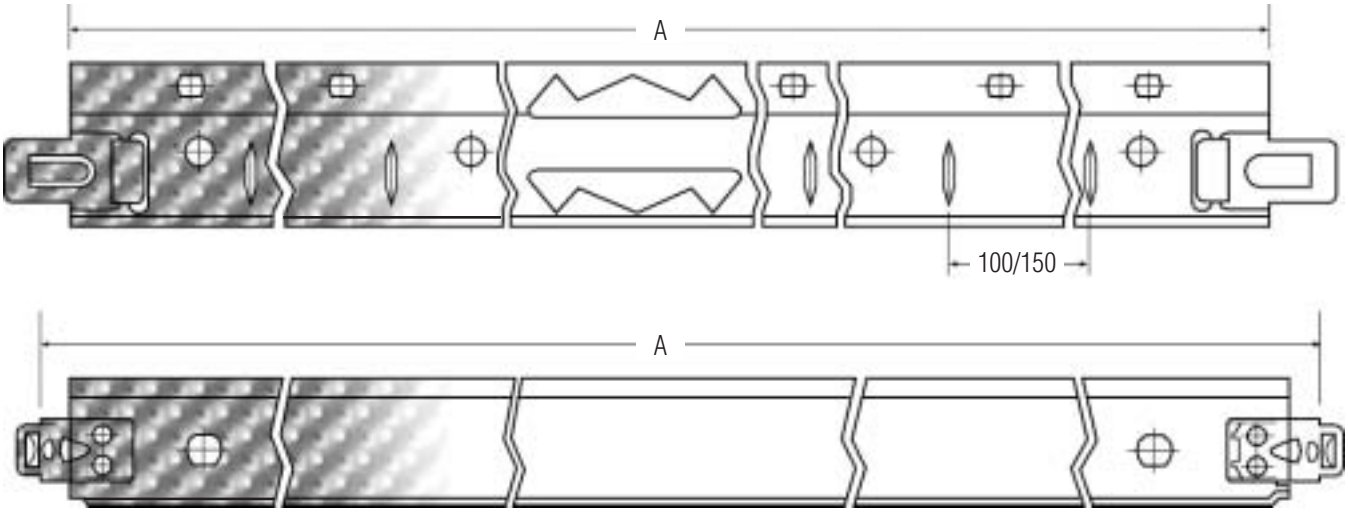


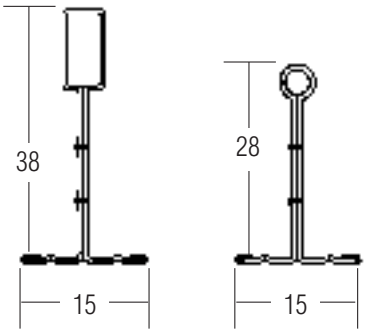


UltraGRID

3815Metric

SYSTEM

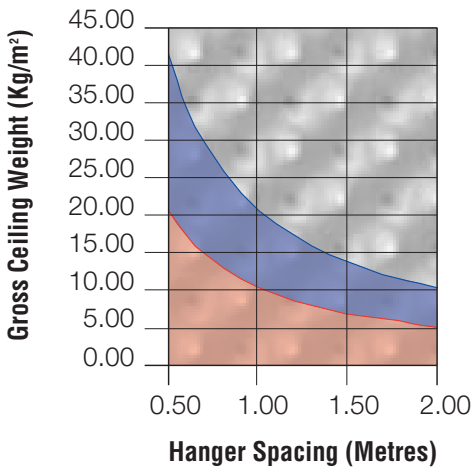


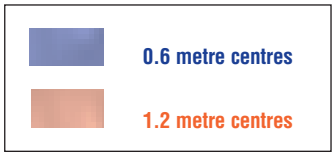


COMPONENT	(A) LENGTH (mm)	QUANTITY. PER BOX	KG PER BOX	METRES. PER BOX
MAIN TEE	3600	25	23	90
CROSS TEE	500	75	8	37.5
CROSS TEE	600	75	9	45
CROSS TEE	1000	75	16	75
CROSS TEE	1200	75	18	90
WALL ANGLE	3600	40	23	144
SHADOW ANGLE	3600	40	30	144

Ceiling grid load carrying information

MAIN TEE





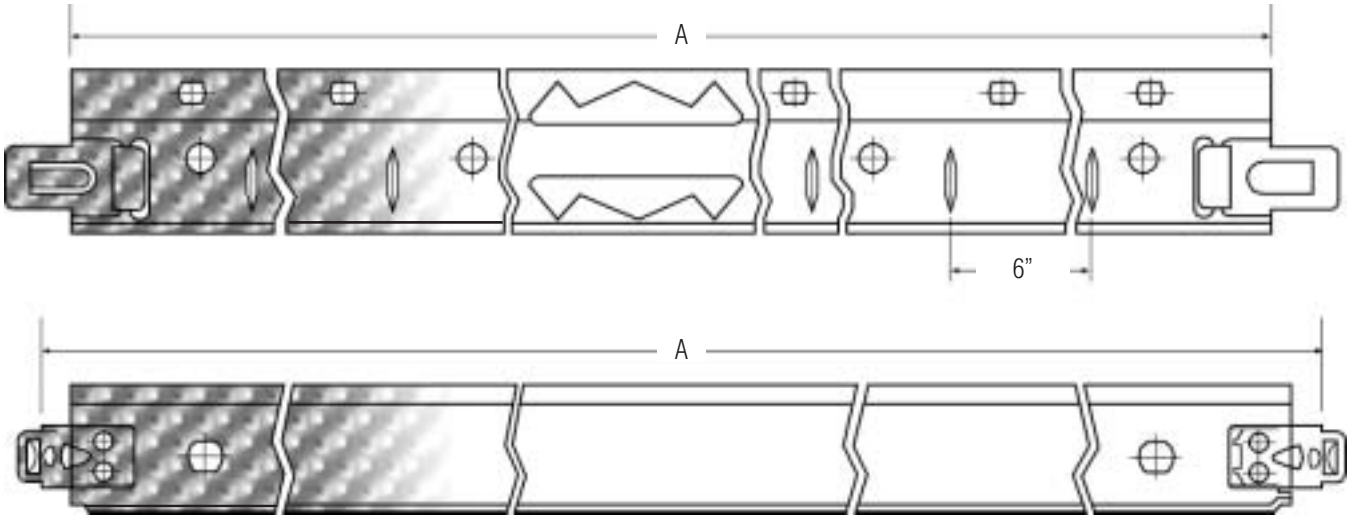
CROSS TEE

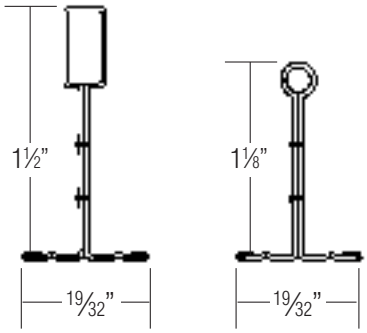
CROSS TEE LENGTHS	SPACING METRES 0.6	1.2
600 mm	27 Kgs	19 Kgs
1200 mm	7 Kgs	3.3 Kgs

MAXIMUM GROSS CEILING WEIGHTS

Once hanger spacings have been established calculate the maximum ceiling weight for the main Tee from the graph, and the Cross Tee from the chart.

The maximum gross ceiling weight allowable is the lower of the two values.

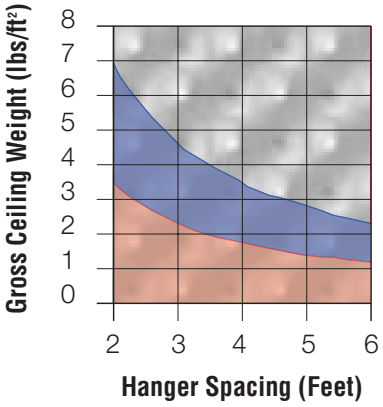




COMPONENT	(A) LENGTH (Feet)	QUANTITY. PER BOX	lbs PER BOX	FEET. PER BOX
MAIN TEE	12	25	51	300
CROSS TEE	-	-	-	-
CROSS TEE	2	75	20	150
CROSS TEE	-	-	-	-
CROSS TEE	4	75	40	300
WALL ANGLE	12	40	51	480
SHADOW ANGLE	12	40	66	480

Ceiling grid load carrying information

MAIN TEE



CROSS TEE

CROSS TEE LENGTHS	SPACING FEET 2’	4’
24”	59.5 lbs	42 lbs
48”	15.4 lbs	7.3 lbs

MAXIMUM GROSS CEILING WEIGHTS

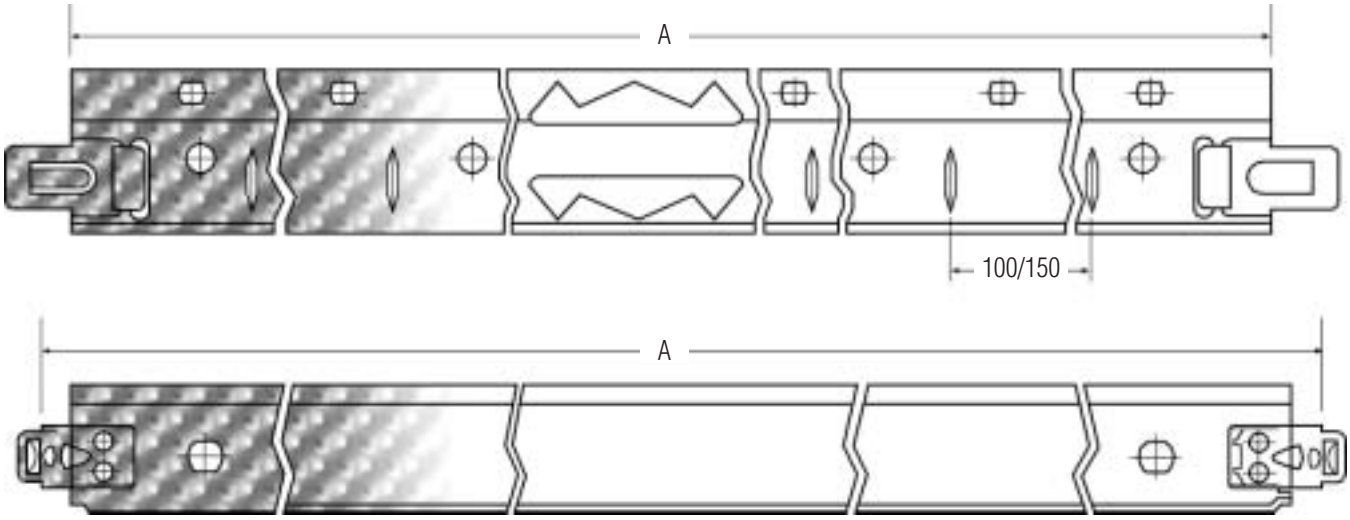
Once hanger spacings have been established calculate the maximum ceiling weight for the main Tee from the graph, and the Cross Tee from the chart.

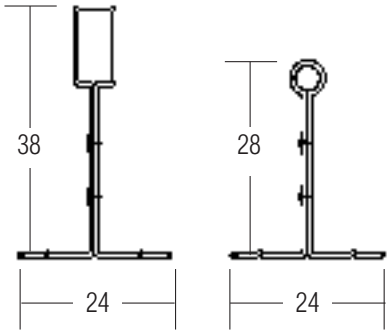
The maximum gross ceiling weight allowable is the lower of the two values.

UltraGRID

3824Metric

SYSTEM

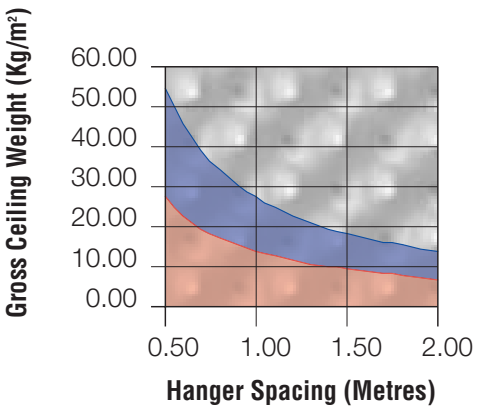


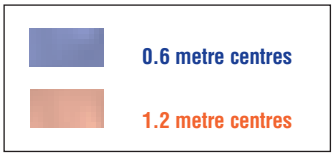


COMPONENT	(A) LENGTH (mm)	QUANTITY. PER BOX	KG PER BOX	METRES. PER BOX
MAIN TEE	3600	25	28	90
CROSS TEE	500	75	9	37.5
CROSS TEE	600	75	11	45
CROSS TEE	1000	75	18	75
CROSS TEE	1200	75	23	90
WALL ANGLE	3600	40	23	144
SHADOW ANGLE	3600	40	23	144

Ceiling grid load carrying information

MAIN TEE





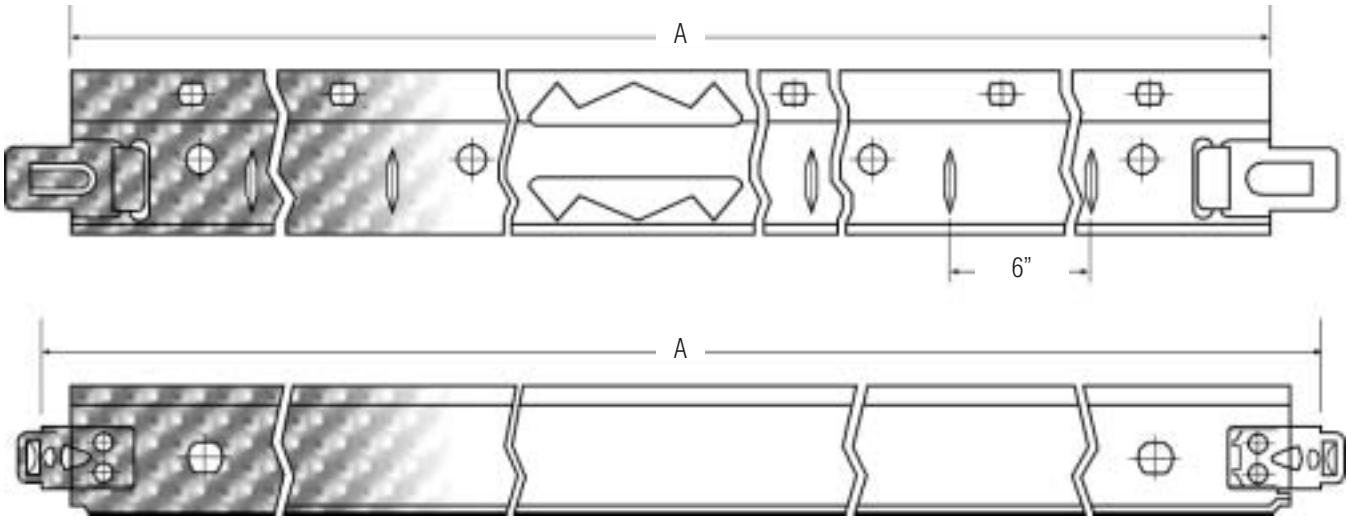
CROSS TEE

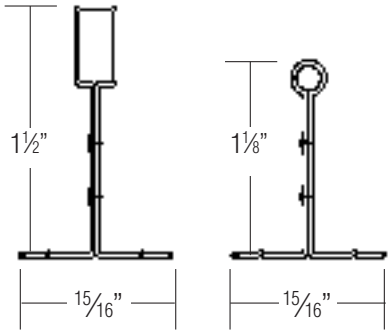
CROSS TEE LENGTHS	SPACING METRES 0.6	1.2
600 mm	46 Kgs	33 Kgs
1200 mm	11.3 Kgs	5.4 Kgs

MAXIMUM GROSS CEILING WEIGHTS

Once hanger spacings have been established calculate the maximum ceiling weight for the main Tee from the graph, and the Cross Tee from the chart.

The maximum gross ceiling weight allowable is the lower of the two values.

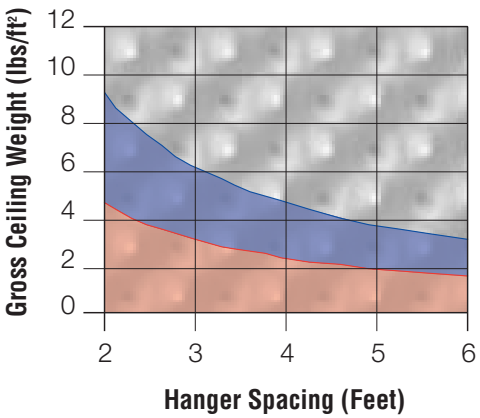




COMPONENT	(A) LENGTH (mm)	QUANTITY. PER BOX	lbs PER BOX	FEET. PER BOX
MAIN TEE	12	25	62	90
CROSS TEE	-	-	-	-
CROSS TEE	2	75	24	150
CROSS TEE	-	-	-	-
CROSS TEE	4	75	51	300
WALL ANGLE	12	40	51	480
SHADOW ANGLE	12	40	66	480

Ceiling grid load carrying information

MAIN TEE



CROSS TEE

CROSS TEE LENGTHS	SPACING FEET 2’	4’
24”	101 lbs	73 lbs
48”	25 lbs	11.9 lbs

MAXIMUM GROSS CEILING WEIGHTS

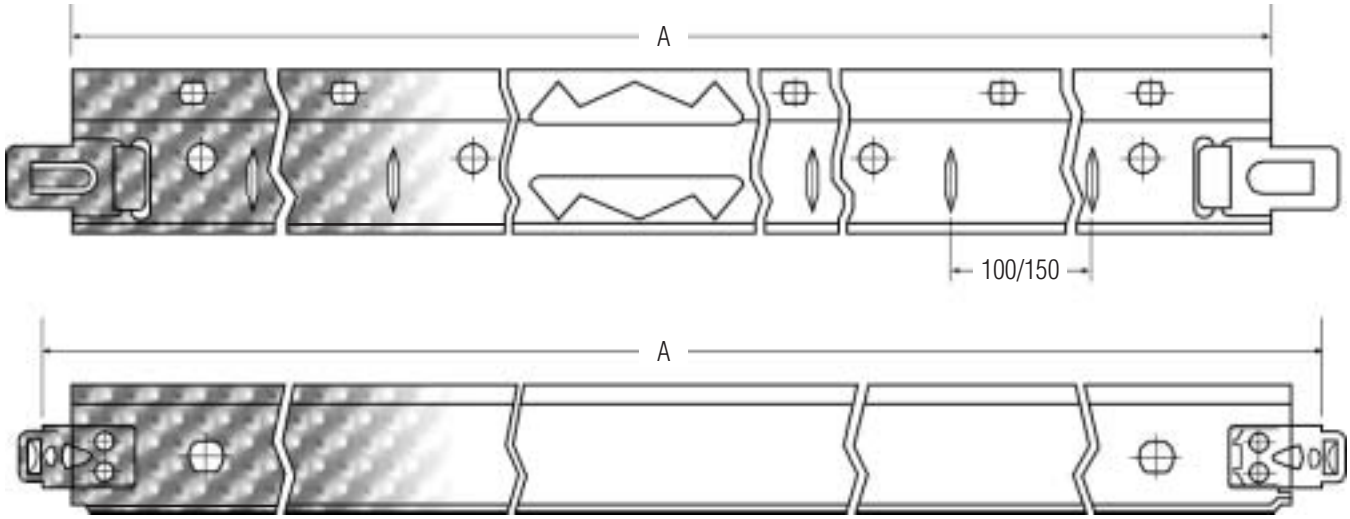
Once hanger spacings have been established calculate the maximum ceiling weight for the main Tee from the graph, and the Cross Tee from the chart.

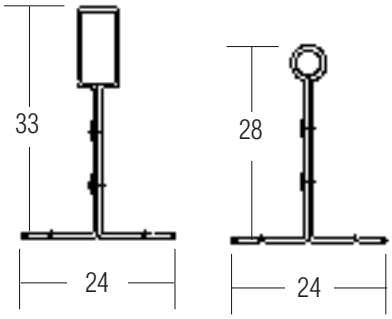
The maximum gross ceiling weight allowable is the lower of the two values.

UltraGRID

3324Metric

SYSTEM





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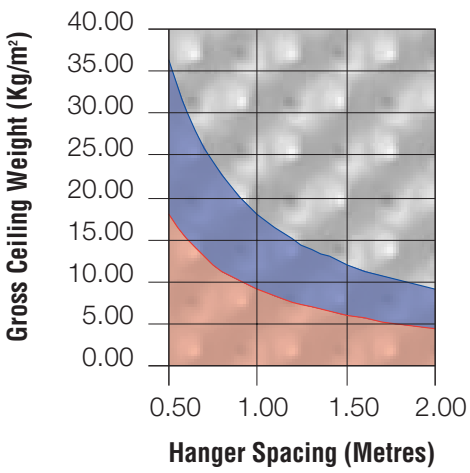
MAIN TEE	3600	25	25	90
CROSS TEE	500	75	9	37.5
CROSS TEE	600	75	11	45
CROSS TEE	1000	75	18	75
CROSS TEE	1200	75	23	90
WALL ANGLE	3600	40	23	144
SHADOW ANGLE	3600	40	23	144

Ceiling grid load carrying information

MAIN TEE



CROSS TEE

0.6 metre centres

1.2 metre centres

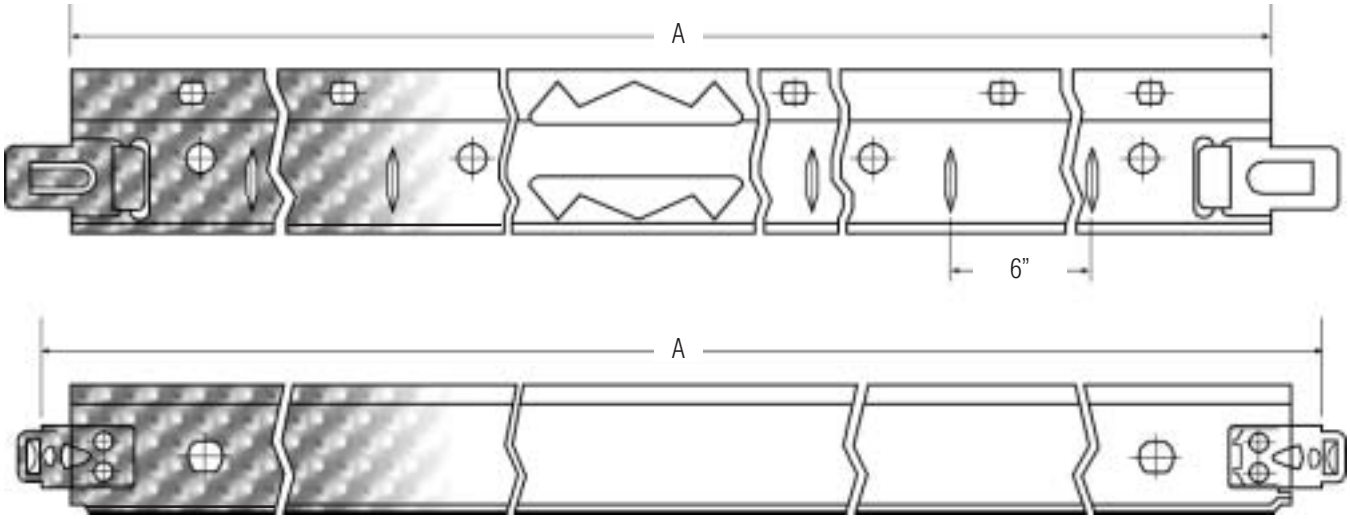
CROSS TEE LENGTHS	SPACING METRES 0.6	1.2
600 mm	46 Kgs	33 Kgs
1200 mm	11.3 Kgs	5.4 Kgs

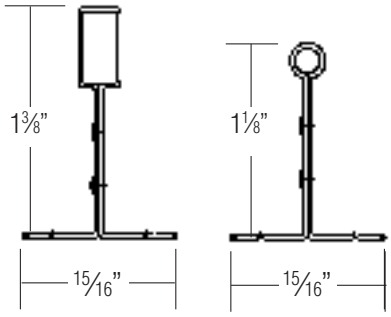
MAXIMUM GROSS CEILING WEIGHTS

Once hanger spacings have been established calculate the maximum ceiling weight for the main Tee from the graph, and the Cross Tee from the chart.

The maximum gross ceiling weight allowable is the lower of the two values.

HADLEY GROUP

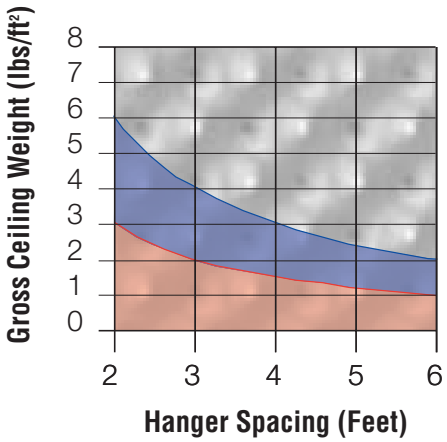




COMPONENT	(A) LENGTH (Ft)	QUANTITY. PER BOX	lbs PER BOX	FEET. PER BOX
MAIN TEE	12	25	55	90
CROSS TEE	-	-	-	-
CROSS TEE	2	75	24	150
CROSS TEE	-	-	-	-
CROSS TEE	4	75	51	300
WALL ANGLE	12	40	51	480
SHADOW ANGLE	12	40	66	480

Ceiling grid load carrying information

MAIN TEE



CROSS TEE

CROSS TEE LENGTHS	SPACING FEET 2’	4’
24”	101 lbs	73 lbs
48”	25 lbs	11.9 lbs

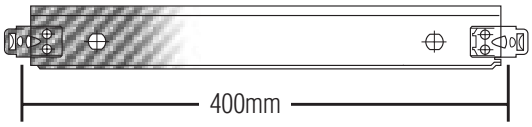
MAXIMUM GROSS CEILING WEIGHTS

Once hanger spacings have been established calculate the maximum ceiling weight for the main Tee from the graph, and the Cross Tee from the chart.

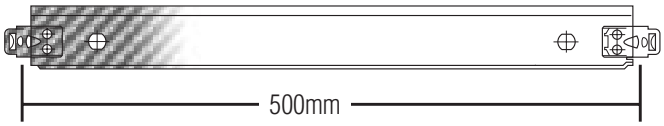
The maximum gross ceiling weight allowable is the lower of the two values.

Slot Detail

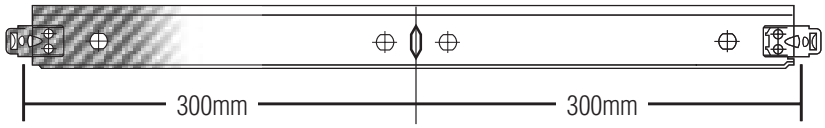
400mm



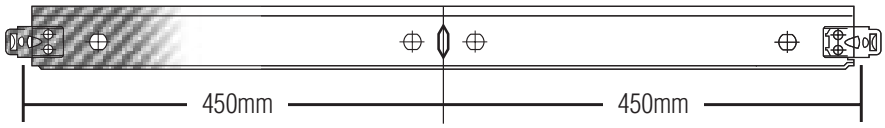
500mm



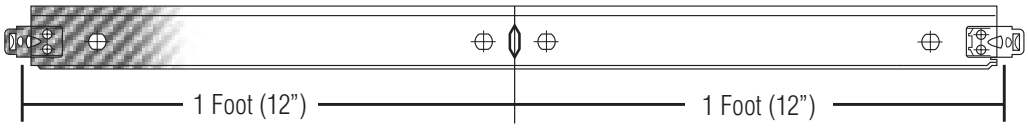
600mm



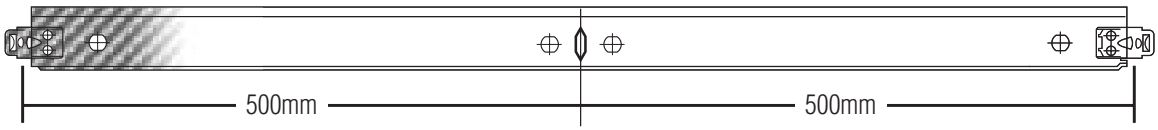
900mm



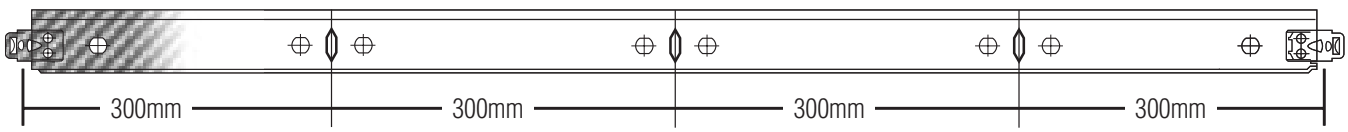
2 FEET (24")



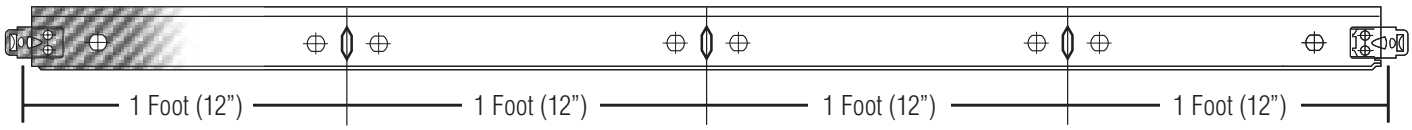
1 METRE (1000mm)



1.2 METRE (1200mm)



4 FEET (48")



HADLEY GROUP

DRAWINGS NOT TO SCALE

FlairLINE

LINEAR

SYSTEM

FlairLINE™ Linear Ceiling Systems are suitable for most commercial, recreational and retail applications as well as residential developments.

FlairLINE™ provides a high performance ceiling with sound insulation and fire protection that can be used for new structures or to upgrade existing ceilings.

HADLEY GROUP

FlairLINE

LINEAR

SYSTEM

APPLICATIONS:

FlairLINE™ Linear Ceiling Systems are suitable for most applications. If the system is to be installed in an aggressive atmosphere where high levels of moisture or corrosive gases such as Chlorine are present, please consult our technical department for advice.

CONSTRUCTION & STORAGE:

Panels and accessories are supplied packed in cardboard cartons designed to protect the product and surface finish whilst in transit from the factory to site. On site the cartons must be stored in a dry and protected area and treated as fragile.

INSTALLATION:

FlairLINE™ Linear Ceiling System should not be erected earlier than at second fix stage. Whilst it is unaffected by moist air conditions for a short period, prolonged exposure and risk of mechanical damage are best avoided by erecting as late as possible in the contract programme. Installation where possible should be carried out by a specialist installer.

FlairLINE™ Linear Ceiling System consists of main carriers fixed at a maximum of 1200mm centres and at 1200mm centres along their length. The hangers should be of rigid construction. In high humidity areas it may be necessary to use stainless steel hangers but if in doubt please consult our Technical Department.

The carrier must not cantilever more than 150mm beyond the last fixing point. Carriers are joined by a carrier connector to form a rigid suspension. The panels are clipped to the carrier producing a 100mm or 200mm module.

Panels are joined by panel connectors and must be supported within 150mm either side of a joint by a main carrier. If a floating edge detail is required the Channel Edge Trim is designed as a push fit over the panel ends and should not require further fixings to hold it in place.

Where external canopies are subjected to wind pressure loading, the main carrier and suspension centres should be reduced to 600mm. Please note that in accordance with the raw material manufacturer's specification, anodised material is not suitable for external applications.

APPEARANCE:

FlairLINE™ Linear Ceilings Panels are cold rollformed from Aluminium or Steel with a pre-coated Polyester low gloss paint finish.

STOCK COLOURS:

White and selected mirror finishes are available directly from stock. Other colours and finishes can be manufactured to order.

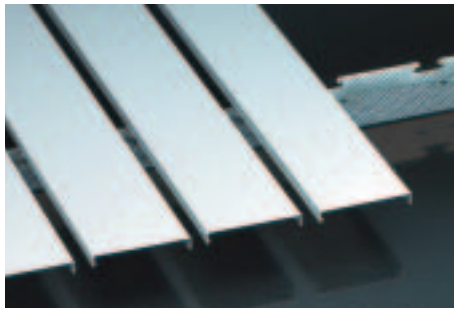
N.B. Infills are available as required, for the 100 and 200 Open systems.

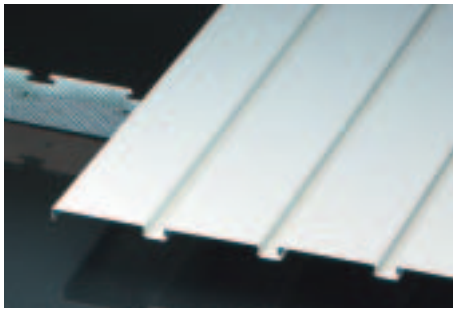
PERFORMANCE:

Structural:	Limit of deflection criteria is 1/450th of span as stipulated in CP 290:1973. If lighting or other mechanical services are to be integrated within the system these must be independently supported.
Light:	The white plain faced panels should provide a reflectance factor of 0.8. Higher levels can be achieved by using special anodised finishes – details available upon request.
Fire:	Fire propagation class "O" as defined in B.S.476: Part 6.

DURABILITY:

The system can last the life of the building if properly maintained.





HADLEY GROUP

WORKABILITY:

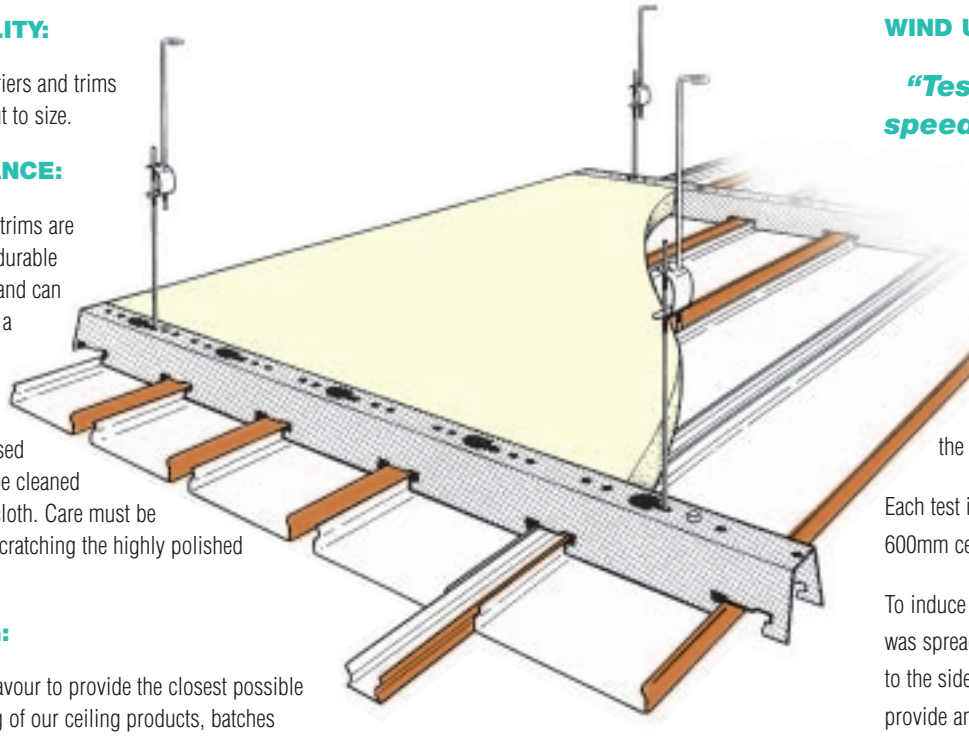
The panels, carriers and trims can be easily cut to size.

MAINTENANCE:

The panels and trims are finished with a durable polyester paint and can be cleaned with a damp sponge and mild detergent solution. Anodised panels should be cleaned with a soft dry cloth. Care must be taken to avoid scratching the highly polished surface.

ORDERING:

Whilst we endeavour to provide the closest possible colour matching of our ceiling products, batches should not be mixed within the same ceiling area.



WIND UPLIFT:

"Tested to withstand wind speeds in excess of 100mph"

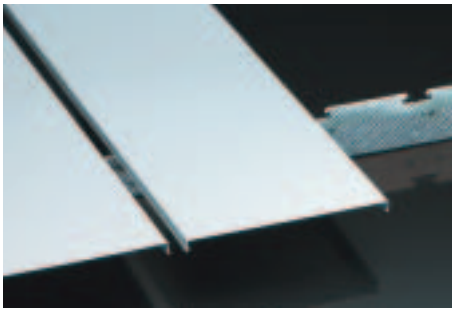
The performance of the **Flair**LINE™ Linear Ceiling System was established by a rigorous series of full scale tests inside a vacuum chamber at The Hadley Group's own research and testing facility in the U.K.

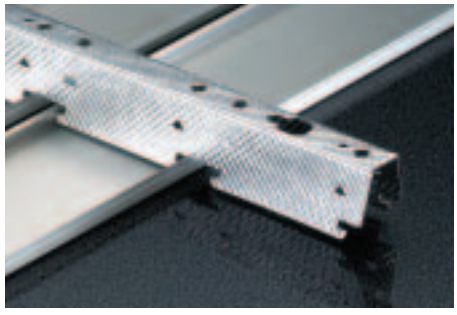
Each test involved suspending a ceiling grid at 600mm centres to simulate an external installation.

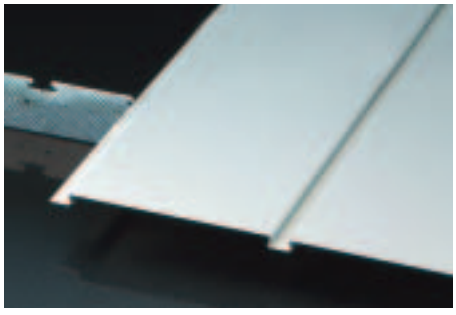
To induce a load in the system polythene sheeting was spread over the complete ceiling area and taped to the sides and ends of the vacuum chamber to provide an airtight seal.

Air was removed from the chamber using a laboratory vacuum system to induce the desired loading.

Deflection and vacuum load were measured electronically throughout the test procedure.



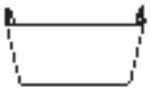
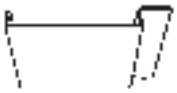
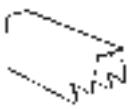




FlairLINE

LINEAR

SYSTEM

SECTION	ITEM DESCRIPTION	PACKAGING		
		Pack Quantity	Pack Size (mm)	Pack Weight
	100 Open Panel	20 x 4m	110 x 125 x 4050	13 kg
	100 Closed Panel	20 x 4m	110 x 125 x 4050	15 kg
	200 Open Panel	20 x 4m	110 x 220 x 5050	30 kg
	200 Closed Panel	20 x 4m	110 x 220 x 5050	32 kg
	Infill Strip	100 No. 50 No.	370 x 260 x 120 370 x 260 x 120	2 kg 2 kg
	Shadow Edge Trim	50 x 4m	110 x 125 x 4050	10 kg
	Panel Connector 100 Panel Connector 200	100 No.	370 x 260 x 120	6.5 kg
	Carrier Connector	100 No.	370 x 260 x 120	6.5 kg
	Channel Edge Trim	50 x 4m	110 x 125 x 4050	10 kg
	Adjustable Hanger	250 (600mm drop)	550 x 200 x 200	15 kg
	Hold Down Clips	250 No.	550 x 200 x 200	15 kg
	Universal Main Carrier	30 x 4m	110 x 125 x 4050	43 kg

HADLEY GROUP

XtraSPAN

CoverFAST

SYSTEM

Xtraspan **CoverFAST** is a lay-in metal Ceiling System capable of spanning up to three metres without the need for intermediate support.

Panels are produced from durable Polyester coated aluminium or steel and are available in widths of either 200mm or 300mm.

A special edge design ensures that the panels firmly interlock along the entire length to create an attractive 'V' jointed appearance.

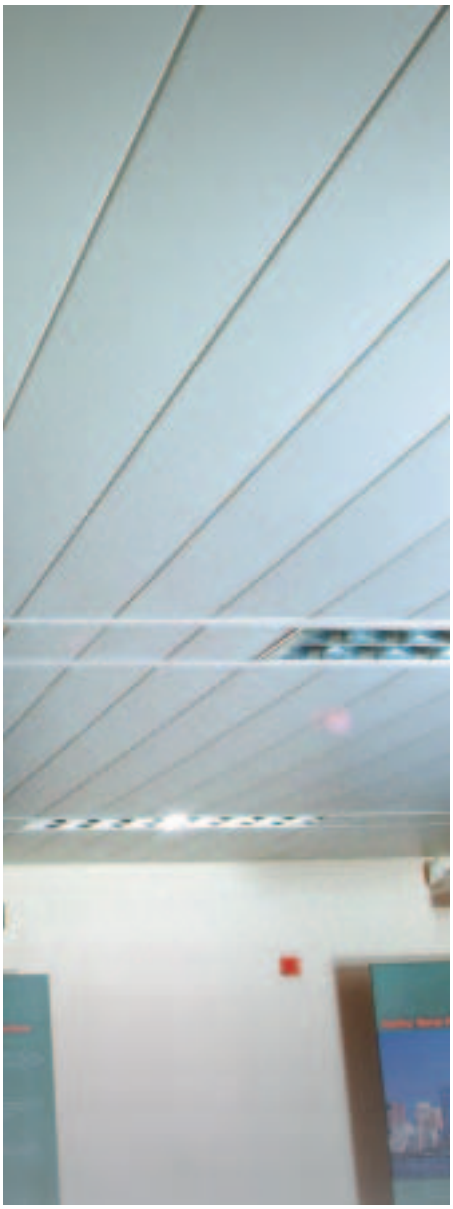
The system has been carefully designed to offer benefits to the Specifier, Contractor and End User.

HADLEY GROUP

XtraSPAN

CoverFAST

SYSTEM



- *Quick and simple system to install, allows on-site cost savings*
- *Strong 3000mm single span*
- *Only 5 components for easy fixing*
- *Allows easy access to services and roof space*

Xtraspan **CoverFAST** is a lay-in metal Ceiling System capable of spanning up to three metres without the need for intermediate support.

Panels are produced from durable Polyester coated aluminium or steel and are available in widths of either 200mm or 300mm.

A special edge design ensures that the panels firmly interlock along the entire length to create an attractive 'V' jointed appearance.

The system has been carefully designed to offer benefits to the Specifier, Contractor and End User.

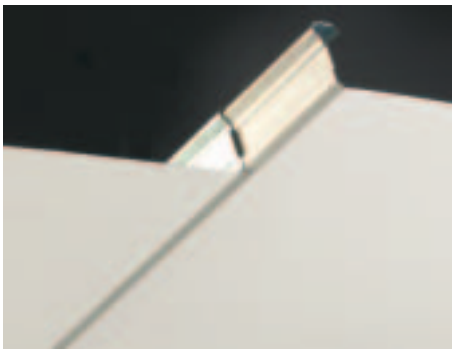
SPECIFIER BENEFITS

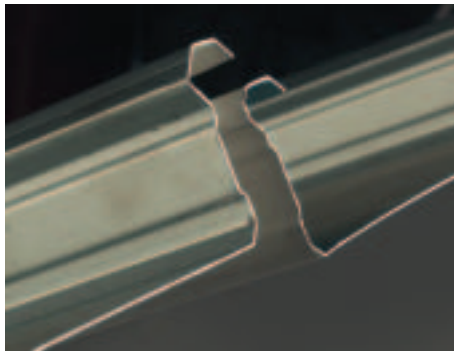
Excellent appearance with strong clean lines. Highly flexible in terms of compatibility and integration with all types of services. e.g. Light Fittings, Air Conditioning Units, Sprinkler Systems etc.

Xtraspan **CoverFAST** gives the ceiling designer almost total freedom to incorporate a variety of services. This is simply achieved by varying the distance between Trunking Sections to accommodate any independently suspended equipment. e.g. Light Fittings, Air Conditioning Units, Sprinkler Systems etc.

SYSTEM COMPONENTS

- CEILING PANELS
- TRUNKING SECTION
- INFIL STRIP
- SHADOW EDGE TRIM
- HOLD DOWN CLIPS



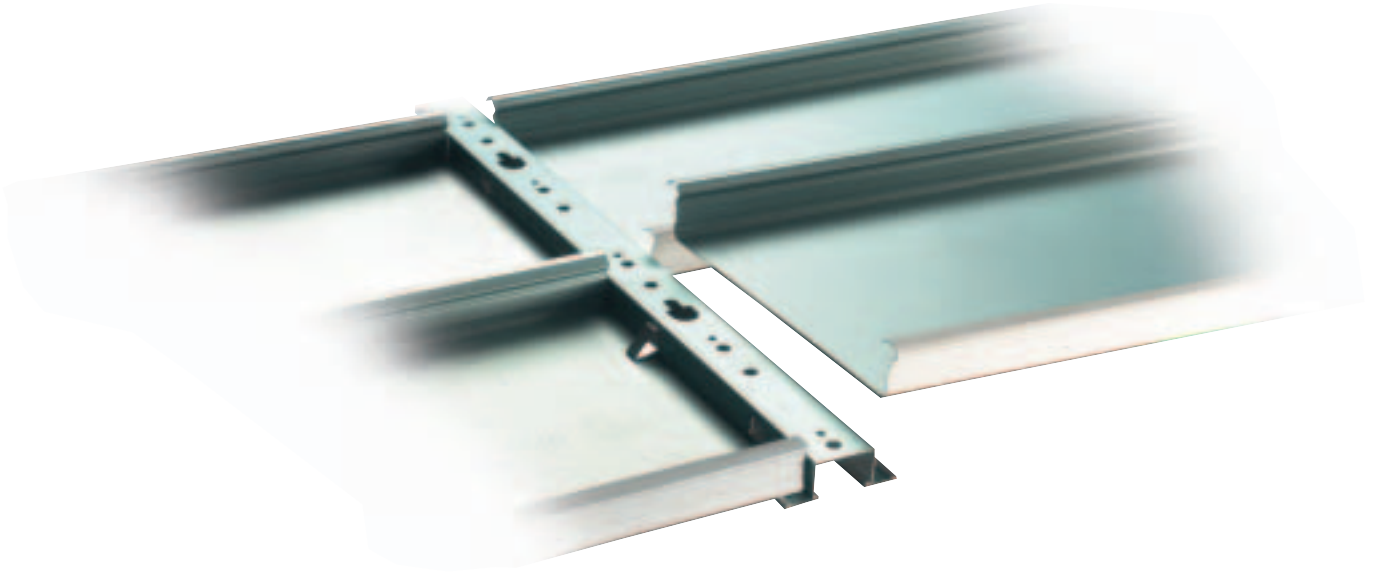


HADLEY GROUP

XtraSPAN

CoverFAST

SYSTEM



CONTRACTOR BENEFITS

Very quick and easy to fit. Less Grid to fix, fewer panels to install and reduced number of suspension points to create. In fact the entire system consists of only five components.

INSTALLATION

Panels are simply laid on to a purpose designed Shadow Edge Trim or Trunking Section and are secured with special clips.

Comprehensive fitting instructions are supplied with every carton of Panels. Additional copies are available upon request or visit our Website at www.hadleygroup.co.uk

COMPOSITION AND MANUFACTURE

Ceiling Panels, Trunking Sections and Shadow Edge Trims are Cold Rollformed from pre-painted Aluminium or Galvanised Steel. Hold Down Clips and Trunking Infil Strips are produced from white PVC.

COLOURS AND FINISHES

Ceiling Panels and accessories are available from stock in white (subject to availability). Special colours and finishes can be produced for areas over 500m2.

Please contact our technical department for details.

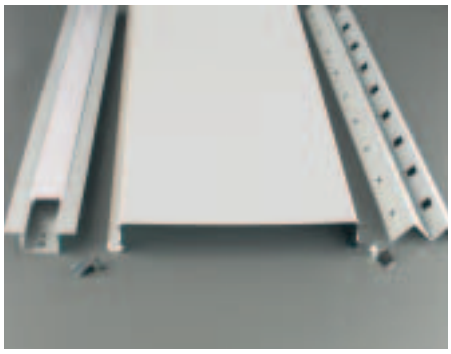
APPLICATIONS

Xtraspan **CoverFAST** is suitable for most internal suspended ceiling applications. It is particularly effective in covering large areas such as Retail Environments, Airports and Office Buildings where its attractive and practical performance can be fully exploited.

The system is also especially suitable for Kitchens and Food Preparation Areas, Hospitals and Clean Room Environments because of its closed joints and wipe-clean smooth surface.

END USER BENEFITS

Excellent value for money, durable, ultra-low maintenance, providing easy access to any part of the ceiling void.



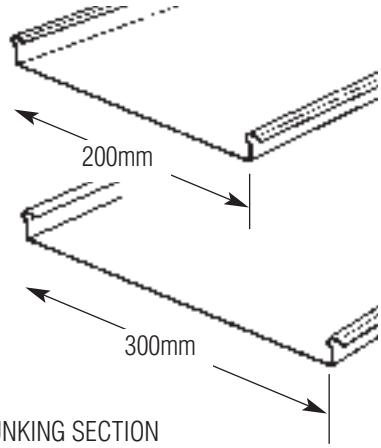
XtraSPAN

CoverFAST

SYSTEM

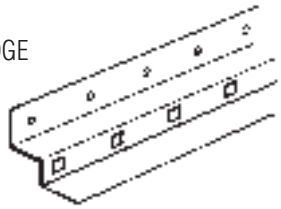
SYSTEM COMPONENTS

PANELS AVAILABLE IN TWO WIDTHS

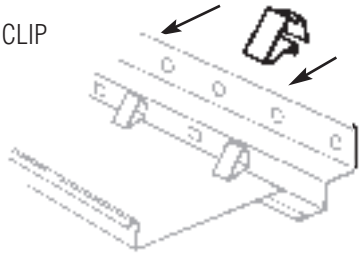


TRUNKING SECTION

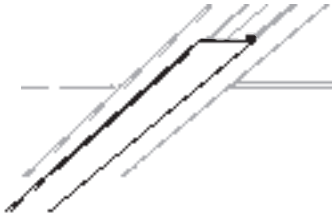
SHADOW EDGE TRIM



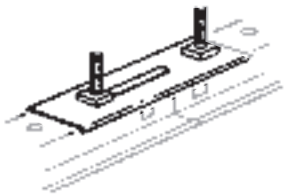
FIXING CLIP



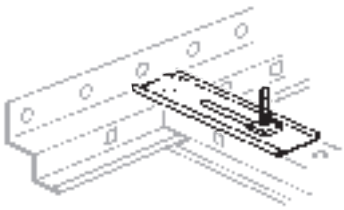
INFIL STRIP



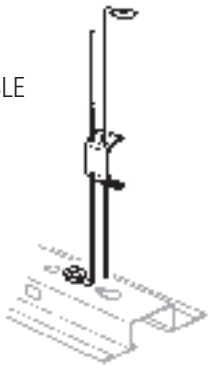
FIXING ACCESSORIES



TRUNKING CONNECTORS



ADJUSTABLE HANGER



PERFORMANCE

STRUCTURAL
Limit of deflection criteria is 1/450th of span as stipulated in CP 290:1973.

FIRE

Fire Propagation Class "O" as defined in BS 476:Part 6.

Surface spread of flame Class "1" as defined in BS 476:Part 7.

MAINTENANCE

The panels are finished with a durable polyester paint for long life and can be cleaned with a damp sponge and mild detergent solution.

APPLICATION

Xtraspan **CoverFAST** is suitable for most internal suspended ceiling applications. If the system is to be installed in an aggressive atmosphere where high levels of moisture are present for long periods of time or corrosive gases such as Chlorine are present, please consult our Technical Department for advice.

TECHNICAL SERVICE

ADVISORY
Full technical support is available to specifiers.

PACKING & STORAGE

Panels and accessories are supplied packed in cardboard cartons designed to protect the product and surface finish whilst in transit from factory to site. On site the cartons must be stored in a dry and protected area and treated as fragile.

ORDERING

Whilst we endeavour to provide the closest possible colour matched ceiling products, batch numbers should not be mixed within the same ceiling area. It is essential, therefore, that the total quantity of material for any project is ordered initially to allow all of the components to be manufactured from a single batch of raw material. If this criteria is not met, then no liability or costs incurred will be accepted by the company for subsequent colour variation.

CEILING

Furring

SYSTEM

The Ceiling Furring System is suitable for most commercial, recreational and retail applications as well as residential developments such as flats and apartments.

The system provides a high performance ceiling with sound insulation and fire protection that can be used for new ceiling structures or to upgrade existing ceilings.

Our Ceiling Furring System is fully compatible with our stud and track partitioning system and provides a flush finish for direct decoration or textured coatings.

HADLEY GROUP

CEILING

Furring

SYSTEM

APPLICATION

The Ceiling Furring System is suitable for most internal dry lining applications. The system provides a high performance ceiling with sound insulation and fire protection that can be used for new ceiling structures or to upgrade existing ceilings.

Ceiling height is variable to accommodate services, ducting etc. Our Metal Furring System is compatible with our Stud and Track Partitioning System and provides a flush finish for direct decoration or textured finish.

INSTALLATION

Perimeter Angle or Perimeter Channel is fixed to the walls around the edge of the room providing a location for the Ceiling Furring Channel.

Primary Channel is suspended at a maximum of 1200mm centres using either one of the methods shown at foot of the next page:

A. RIGID ANGLE.

B. GALVANISED WIRE.

C. ADJUSTABLE ROD SETS.

Allowance must be made for the thickness and number of layers of plasterboard to be used. Fix the Furring Channels at right angles to the Primary Channel at 450mm or 600mm centres using Double Spring Clips.

Plasterboard is fixed using self tapping screws to the underside of the Ceiling Furring and Perimeter Angle/Channel.

When two layers of board are used, joints must be staggered.

FIRE TESTING

The Ceiling Furring System has been fire tested in accordance with BS 476: Part 23: 1987 Section 5. The specimen tested was of overall nominal size 4000mm x 3000mm wide consisting of a steel framework comprising of Ceiling Furring Channels at nominal 450mm centres, which were fixed to Primary Channels with steel clips.

The Channels were suspended using Galvanised Angle at approximately 1200 centres.
The underside of the Ceiling Furring Channels were lined with two layers of Plasterboard 12.5mm thick.

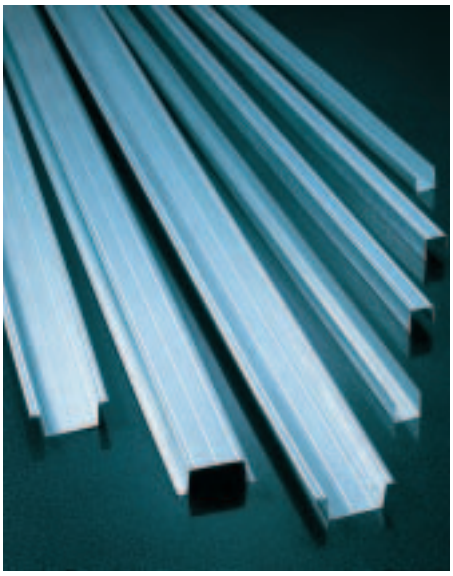
All joints were staggered with respect to those of the previous layer and the outermost joints were taped and sealed with joint filler to BS 6214.

The test was discontinued at 43 minutes giving protection of 40 minutes to the beams above. This therefore exceeds the 30 minutes fire test rating required in most applications.

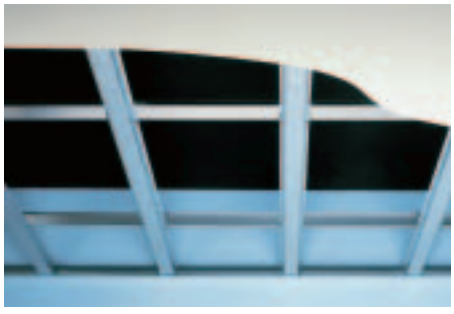
Fire certificate is available upon request.

BRITISH STANDARDS

Pre Hot Dipped Galvanised to BS EN 10142: 2000



	Fixing Centres			
	Ceiling Furring (X)	Primary Channel (Y)	Fire Rating	Max Rec. Load
1 Layer P/ Board	600mm	1200mm	-	26
2 Layer P/Board	450mm	1200mm	½hr	26

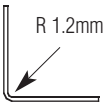
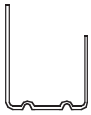


HADLEY GROUP

Furring

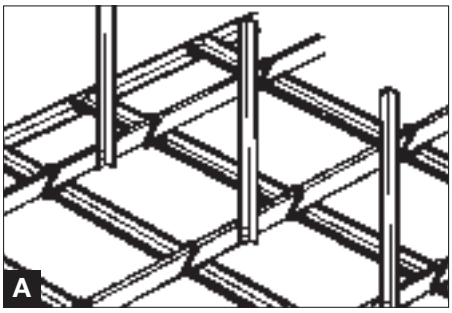
SYSTEM

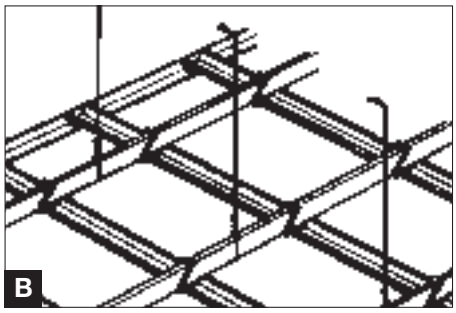
PRODUCT RANGE/DIMENSIONS

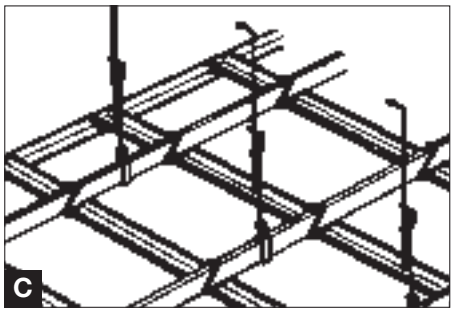
	SECTION	DIMENSION (mm)	THICKNESS (mm)	TAPED IN	BUNDLED IN	APPROX. WEIGHT Per 100m
	**ULTRA FURRING**	80.5 x 26	0.5	10	100	50.00kg
	**PRIMARY CHANNEL**	45 base x 15 deep	0.85	10	100	48.00kg
	**25MM X 25MM 90º ANGLE**	25 x 25	0.80	20	500	30.00kg
	**PERIMETER CHANNEL**	30 x 27.2 x 20	0.5	10	100	30.00kg

ALL SECTION STOCKED IN 3.6 METRE LENGTHS.
SPECIAL CUT LENGTHS AVAILABLE UPON REQUEST.
ALL SECTIONS FORMED FROM PRE-GALVANISED MILD STEEL TO BS 2989 : 1991(Z2), EN10142 : 1990

	ACCESSORIES					WEIGHT PER 100
	**PREFORMED SPRING CLIP**	-	-	-	200	0.62kg







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HADLEY GROUP
P.O. Box 92, Downing Street, Smethwick,
West Midlands B66 2PA

Telephone: +44(121) 555 1300
Fax: +44(121) 555 1301
E-mail: sales@hadleygroup.co.uk
Website: www.hadleygroup.co.uk

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