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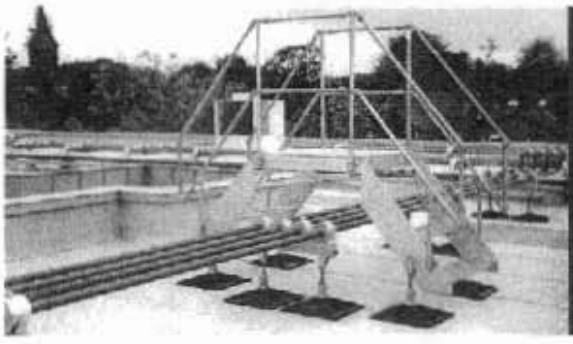
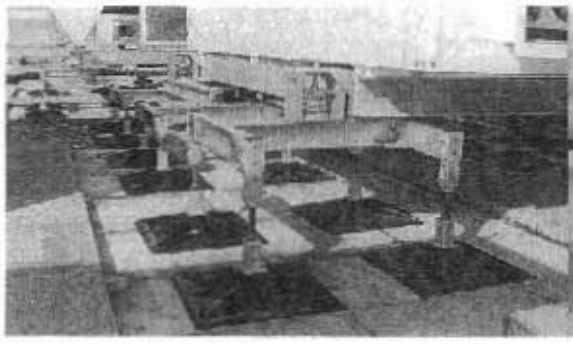
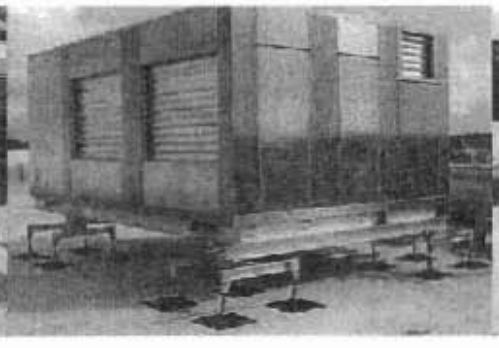
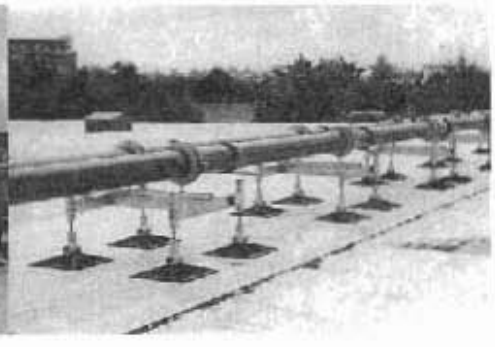


ROOF-PRO

SYSTEMS







SUPPORTS FOR BUILDING SERVICES AND ACCESS EQUIPMENT

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ROOF-PRO
Products, Systems & Designs



ROOF-PRO SYSTEMS

SUPPORTS FOR BUILDING SERVICES AND ACCESS EQUIPMENT

THE SUSTAINABLE WAY TO SUPPORT BUILDING SERVICES

ROOF-PRO systems are designed to provide a future-proof solution for supporting building services. The ROOF-PRO solution is flexible and efficient, supporting services from 50mm pipes to 10,000 kg AHU's independently on a range of flat roof designs.

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ROOF-PRO support systems are designed to each individual roof structure utilising standard and bespoke designs to provide stability, weight distribution and building clearance, ensuring your services are fully supported without the need for penetrative design details to the waterproofing.

ROOF-PRO has extensive experience of working with specifiers and contractors on a range of projects, from refurbishment to new build. Consultation is available at design stage for best results, but can be conducted at various stages of the build process with multiple disciplines to ensure objectives are achieved.

A COMPREHENSIVE ROOFTOP SUPPORT SOLUTION

At ROOF-PRO we have developed a number of support solutions covering all the areas of building services needs, each designed with ROOF-PRO specialist components. The systems range includes:

- Supports for ladder and cable trays
- Small to large pipe supports.
- Support systems for AHUs, heat pumps and chillers.
- Duct, attenuator and extract fan supports.
- Condenser supports, small splits, VRV and VRF.
- Access, step-overs, and maintenance platforms.

COMPONENT FEATURES

A variety of ROOF-PRO **support bases** are strategically utilised with the support frames to manage the load and provide services maximum stability without membrane penetration. The bases incorporate a **pivot and threaded** adjuster for roof clearance and on-site adjustments, allowing services to sit true on the roof gradient.

ROOF-PRO understand the need for flexibility. Every **hot dip galvanised support frame** is engineered to the specific requirements of each project. Services can be easily installed and even combined on our frames which can adjust with the building's needs. Frames are prefabricated and quality checked before site delivery, ensuring that installation is simple and quick.

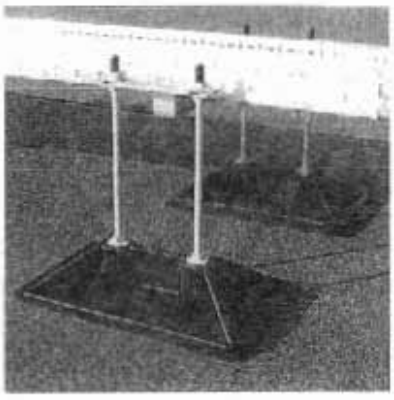
For small/medium pipes and cable trays the **TAB support base** offers a broad support. The extended base with twin threaded uprights allows support to pipes at finitely adjustable heights. The TAB utilises a slotted bracket permitting the quick and easy removal of the base and studs during re-roofing.



Pivot and threaded support base



Support frame

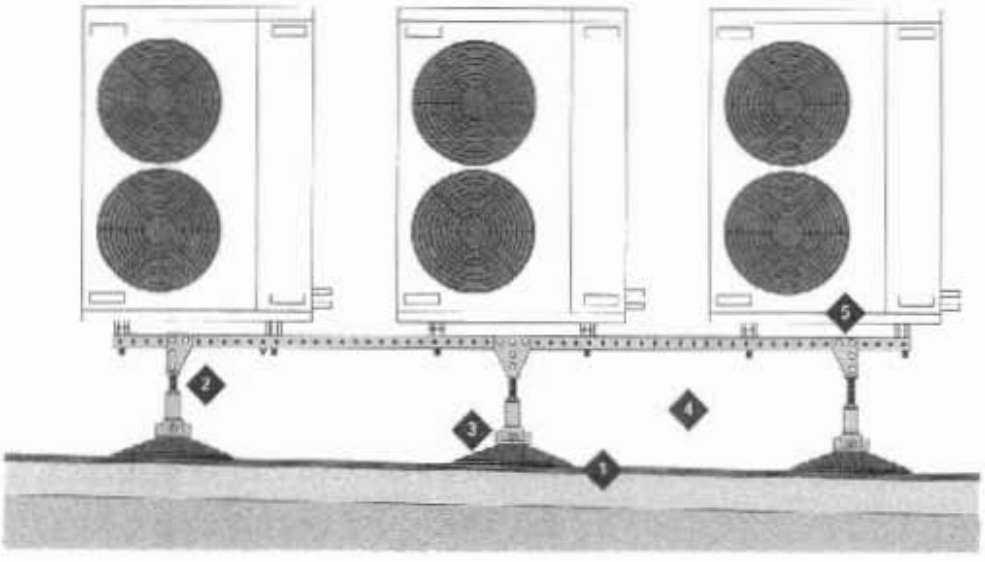


TAB support base

ROOF-PRO SYSTEMS
SUPPORTS FOR BUILDING SERVICES AND ACCESS EQUIPMENT

ROOF REFURBISHMENT MADE EASY

ROOF-PRO supports are quickly and simply positioned on the roof finish without penetrating or damaging the membrane. Building services and equipment are supported above the finished level of the roof providing clearance, which facilitates maintenance and re-roofing without expensive decommissioning of building services.



1. *No penetrations to the roofing membrane. Facilitates airtight roof design – no thermal bridging (Part L).*
2. *Height adjustable supports.*
3. *Pivot and threaded adjustment to accommodate roof gradient.*
4. *Building clearance facilitating access for roofing maintenance.*
5. *Support leg can be detached permitting a staged refurbishment of the roofing membrane.*

Sustainability

Current legislative and environmental trends call for greater environmental accountability in the design and use of buildings. The specification of the ROOF-PRO System contributes towards a sustainable building design.

- Non-penetrative – Facilitates airtight envelope design and eliminates cold bridging (Part L).
- Life cycle – ROOF-PRO System is flexible, adjusting to the long term needs of the roof and services.
- Increased roof service life – Elimination of vulnerable penetration detailing and the facilitation of membrane repair.

A risk-free solution

The non-penetrative design of ROOF-PRO avoids the risks of leaks that are often associated with complex detailing at vulnerable junctions on the roof. Contractors and designers can also have peace of mind that the ROOF-PRO System is engineered by our design team with stability and weight distribution as a primary principle.

Roof refurbishment made easy

The ROOF-PRO support systems allow access to the roof surface, making refurbishments and maintenance efficient and simple. The support bases on our frames can be removed following our method statements, allowing for re-roofing without interruption to building services.

Design and programming flexibility

Because ROOF-PRO supports are independent of the roof assembly, there is no pressure for premature decision making on the required positioning of supports. This allows mechanical and electrical engineers to establish their requirements, and then for ROOF-PRO to provide the support system that best meets these requirements.

Correlation of relevant design information permits a co-ordinated proposal at tender stage that can be revised as the project evolves.

No problems co-ordinating roofing work activities

Project management is more straightforward because there is less need to co-ordinate different activities. The lightweight nature of ROOF-PRO supports, and their independence from the waterproof membrane, allow different trades to work in an autonomous way. A flat roofing contractor can be presented with an uninterrupted area of roof. No subcontractor is required to form upstands. The M&E trades can access the roof when it is finished to carry out their work.

Reliability and fast delivery

We realise how important it is to make sure systems are delivered on time. At ROOF PRO, we go out of our way to develop our operations so we can pull out all the stops when you need us to. Many of our products, including customised frames, can be turned around quickly with our dedicated production planning.



ROOF-PRO SYSTEMS

SUPPORTS FOR BUILDING SERVICES AND ACCESS EQUIPMENT

THE ROOF-PRO SERVICE

At ROOF-PRO we offer the project team a comprehensive service from the planning and design stages to delivery. At the earliest stages our team of technical sales managers and experienced design engineers will assess your requirements and follow your design criteria through to completion.



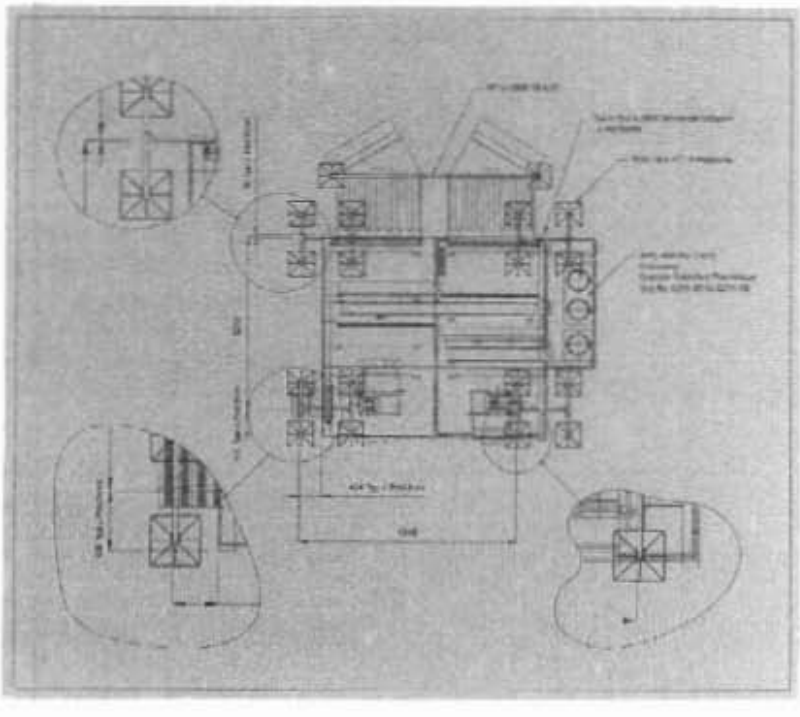
The ROOF-PRO team assist in:

- Surveying – Site or office visit to evaluate your needs and detail your requirements.
- Estimating – A detailed project costing including all relevant designs.
- Calculations – An engineered assessment of the building services stability and load management.
- CAD – Co-ordinated drawings showing how our system will operate on your project.
- Co-ordination – With key members of the project team.
- Delivery – Working closely with our logistic partners we make sure you have your goods on site, on time. We have a particularly good lead-time for bespoke components.
- Aftersales – O & M documentation with liaison and consultation on long-term maintenance issues and re-roofing requirements.

ALL-ROUND TECHNICAL EXPERTISE

We not only offer the best in system design, we also provide technical support and advice. We aim to ensure that the building owner gets a superior and cost effective solution for the management of rooftop services every time.

- We will recommend and design the most appropriate support system for a particular roof assembly.
- We work in a holistic way – understanding the roof assembly as a whole, and how various structural elements and our solutions integrate within the construction. We not only provide the best solution, we can also identify potential issues and advise accordingly.



ROOF-PRO

THREE POINT CERTIFICATION

For full delivery of system objectives, our Three-Point Certification represents an undertaking that ROOF PRO installations meet the high quality standards expected by our clients. The certificate assesses stability and design, and also ensures that future requirements are incorporated.

Three-Point Certification covers:

1. Stability – We make calculations of your services stability, including wind loadings.
2. Load Management – We design our supports within the structural and waterproofing assembly limits set by the structural consultants.
3. Building Clearance – We make considerations in our designs for vertical and horizontal clearance for safety, aesthetic and future roofing maintenance purposes.

ROOF-PRO SYSTEMS
SUPPORTS FOR LADDERS & CABLE TRAYS

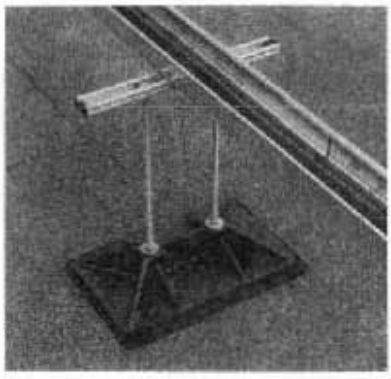
CABLE MANAGEMENT SOLUTIONS

A range of cable tray and ladder support systems is provided for the effective management of rooftop cabling. Utilising the TAB support bases our cable management solutions provide effective clearance and flexibility for future changes in the building's services needs.

SMALL CABLE TRAY

The **TAB** utilises a single broad base that provides effective non penetrative support for cable tray runs carrying low pipe and cable volumes.

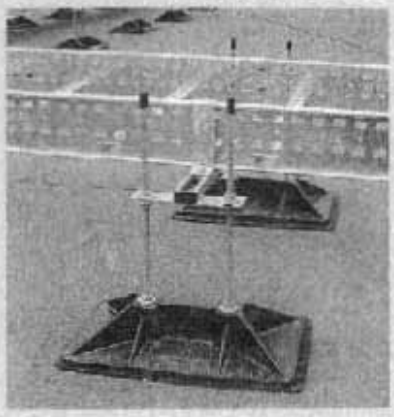
Installation is simple with each cable tray support comprising galvanised studding that permits locating and levelling of service runs.



MEDIUM TO LARGE CABLE TRAY/LADDER

Where there is a project requirement for medium to larger cable tray volumes then the **TAB-C 500**, **750**, and **1000** provide sturdy yet flexible support.

Each support consists of two height adjustable **TAB** supports with an open channel at widths of 500, 750 or 1000mm, with bespoke sizes available upon request.



MULTIPLE TRAYS/LADDERS

The **TAB-2C** system provides support for multiple tiers of cabling on twin support beams. The system is designed to allow a high density of service support with minimum space implications. Capacity can be easily increased with the **TAB-C 500/750/1000 EK**, which extends the **TAB** support from one to two tiers.

The extender kit can also be retro-fitted, providing lifecycle flexibility for future installations.



ROOF-PRO SYSTEMS
SUPPORT FOR PIPES

PIPE SUPPORT SOLUTIONS

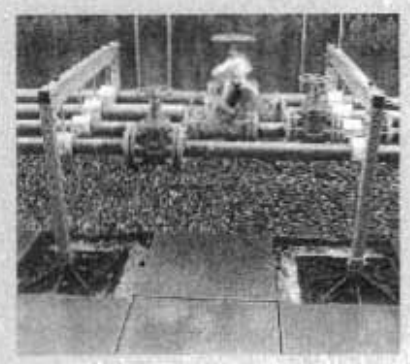
The ROOF-PRO range of pipe support solutions utilise our specialist components so pipes will be secure and stable. The non-penetrative base supports aid flexibility in the positioning and installation of pipes, facilitating future re-routing and maintenance access.

SMALL TO MEDIUM PIPES

For small to medium pipes the **RP-PH** system provides support via an adjustable collar and threaded rods. The pipe suspension system enables pipe levels to be finitely adjusted on site so that the pipes can retain the required clearance regardless of the fall on the roof. The galvanised frames provide the hanging system with a sturdy framework utilising a **PACS** adjuster or pivoting leg for frame height adjustments.

The **TAB-P** support system can be used on site to support a run of lightweight pipes up to 50mm in diameter. The TAB system supports pipes on an open channel allowing for positioning of the pipe clips. The threaded adjuster on the TAB is adjustable to accommodate roof falls, aiding the levelling of pipes.

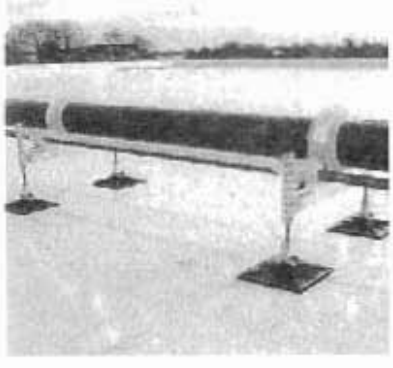
The threaded upright supports are adjustable to accommodate roof falls, or should a backfall be required for the pipework.



MEDIUM TO LARGE PIPES

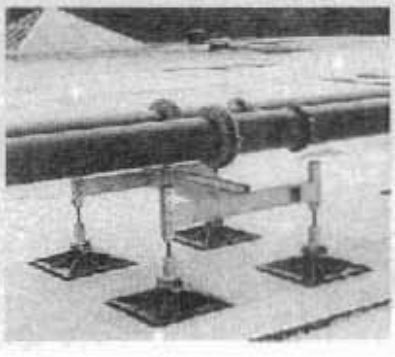
The **RP-P-T** system is designed to provide flexible yet sturdy support for medium to large pipes. The system provides ample clearance for access to the roofing membrane for re-roofing and maintenance. On the threaded supports 80mm of thread should be visible at the highest point of the roof to allow for subsequent re roofing.

Bracing to supports can be provided by ROOF-PRO where necessary.



LARGE PIPES

For larger pipes, the **RP-P-POD** system provides a solid support for large pipes. Utilising the pivot bases and threaded adjusters the system of supports still has the flexibility of the other ROOF-PRO systems whilst utilising channel beams for greater stability. The system is flexible enough to accommodate additional bases spreading the load over a greater area.



ROOF-PRO SYSTEMS
SUPPORT FOR PIPES

SYSTEM DESIGN

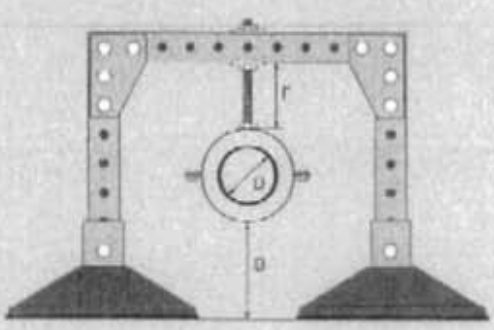
The pipe support systems detailed are the most common configurations of each system for rooftop applications. We will advise on selecting the best pipe system and if any further design configurations are required. Information that will help us to assist you includes:

Pipework
- Nominal bore/wall thickness of pipes
- Type and thickness of pipe insulation
- Support centres
- Target height of pipe work
- Type of pipe and contents
- Pipe centre lines
- Anticipated thermal expansion of pipes
- Supporting preference
- General layout drawing

Roof
- Deck type and construction
- Insulation type and thickness
- Technical membrane specification
- Application details
- Structural limitations
- Roof fall and direction
- Obstruction details
- Expansion joint type and locations

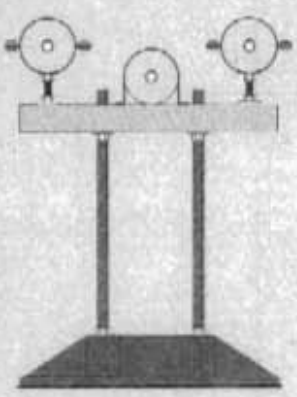
SYSTEM RP-PH

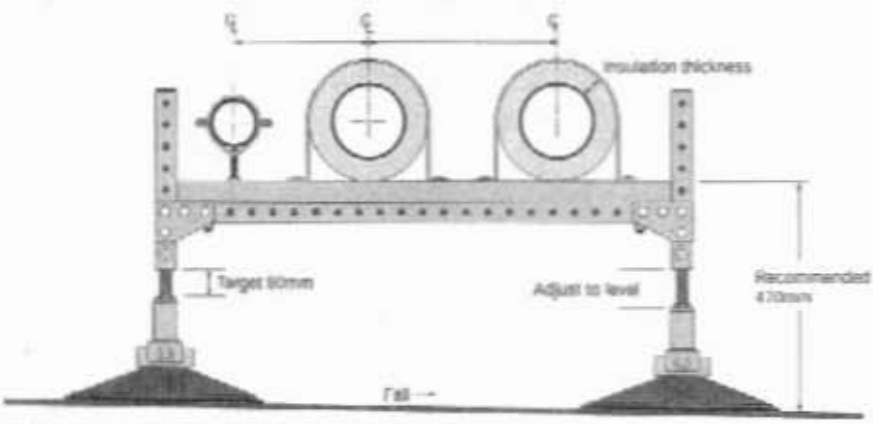
Suspended pipework



SYSTEM TAB-P

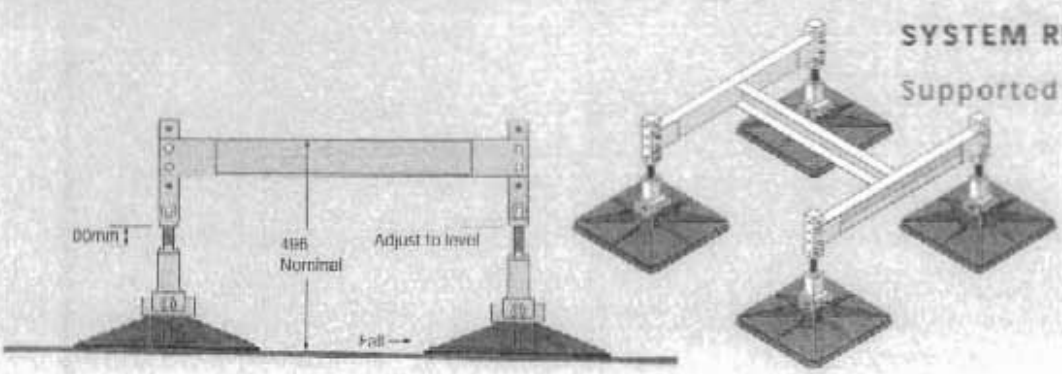
Supported from below





SYSTEM RP-PT

Supported from below



SYSTEM RP-P-POD

Supported from below



ROOF-PRO SYSTEMS
SUPPORT FOR DUCTS

DUCT SUPPORT SOLUTIONS

The ROOF-PRO duct support solutions maintain ducting in place on a roof at the required target height. The ductwork system can be designed to be supported from above or below in combination with other services such as pipes and cables whilst retaining the integrity of the roofing assembly.

SMALL TO MEDIUM DUCTS

The **TAB-D** system clamps the duct at the target height utilising a solid base support with twin threaded uprights. The system allows for changes in height and variation in duct sizes. There are three standard support beam sizes of 500mm, 750mm and 1000mm. Bespoke sizes are also available.



LARGE DUCTS

For larger ductwork, with a top height greater than 1000mm, the **RP-D-T** system is recommended. This system can be designed to work with virtually any sized duct run in parallel with other systems.



MULTIPLE DUCT SUPPORTS

For ductwork that runs in parallel and of different sizes we have a number of options that provide a solution. The **RP-DH** system is designed for ductwork of various configurations.

For ducts that are to be supported above one another, the **RP-2D** provides a solid framework with adjustable bases for on-site adjustments.



ROOF-PRO SYSTEMS
SUPPORT FOR DUCTS

SYSTEM DESIGN

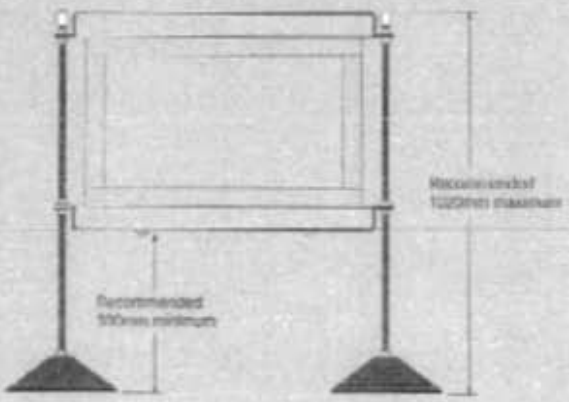
The duct support systems detailed are the most common configurations of each system for roof top applications. We will advise on selecting the best duct system and if any further design configurations are required. Information that will help us to assist you includes:

Ductwork

- Insulation - Note that insulated ducts require a non-compressible packer
- Dimensions
- Target height
- Support centres
- Position and mass of attenuators
- General layout drawing

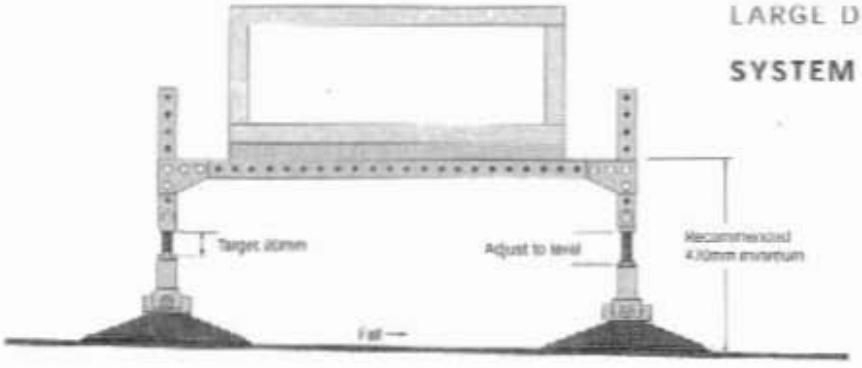
Roof

- Form of roof construction
- Deck type
- Insulation details
- Technical membrane specification
- Application details
- Structural limitations
- Roof fall and direction
- Obstruction details



SMALL TO MEDIUM DUCTS

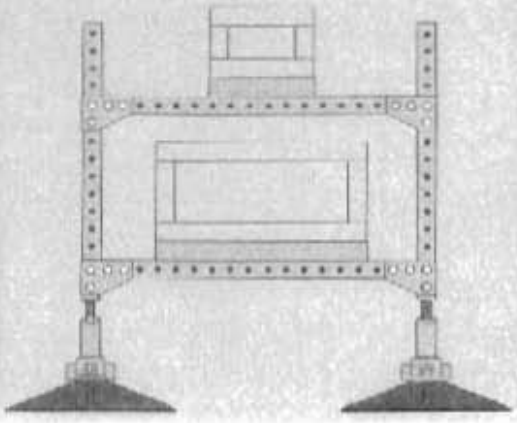
SYSTEM TAB-D-500, 750, 1000



LARGE DUCTS

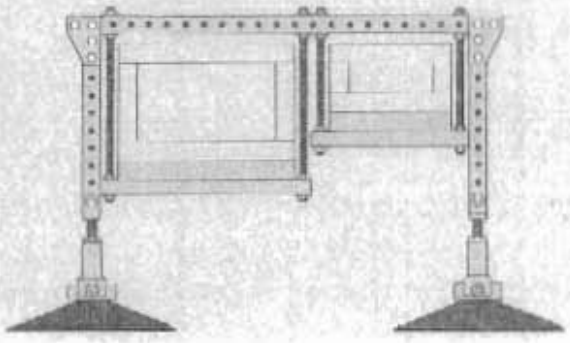
SYSTEM RP-D-T

SYSTEM RP-2D



MULTIPLE DUCT SUPPORTS

SYSTEM RP-DH





ROOF-PRO SYSTEMS

SUPPORT FOR AIR HANDLING UNITS, HEAT PUMPS & CHILLERS

MECHANICAL UNIT SUPPORT SOLUTIONS

The ROOF-PRO System provides a valuable service solution for plant equipment on flat roofs. Our ability to support some of the largest specialised units such as air handling units, heat pumps and chillers means that expensive decommissioning of services can be prevented during future roof maintenance, resulting in economical project co-ordination and services maintenance.

PERIMETER SUPPORTED UNITS

The **RP-CS-T** supports are a simple solution for supporting small mechanical units such as air handling units that have a wide and stable frame with a low centre of gravity. The supports are threaded for on-site levelling, with a top plate for secure fixing to the corners and centre positions. Bracing rods or box may be utilised within the support system for additional stability.



SMALL TO MEDIUM UNITS

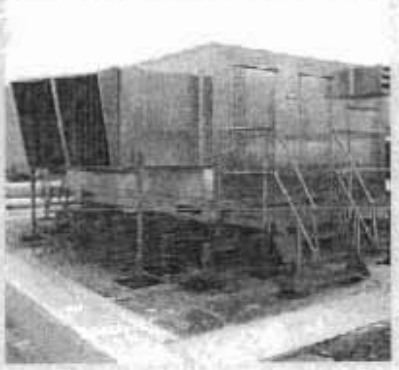
The **RP-PF-T** system supports plant that requires a broader support base to give greater stability. The system works by a series of connected frames with connecting sliding beams (CSB) to give flexibility for unit size. Typical equipment that may be supported on this frame are AHUs. The particular frame arrangement spreads the loads over a number of bases.



LARGE HEAVY UNITS

For heavy units, a suitable support solution that works with the roof design is critical for distributing the services weight. The **RP-POD-T** utilises a galvanised steel pod arrangement, facilitating the distribution of the point loads over four interconnected support bases.

The **POD** frame is supported by the flexibility of the pivot and threaded adjusters which keep the equipment level and clear from the roof surface.



ROOF-PRO SYSTEMS

SUPPORT FOR AIR HANDLING UNITS, HEAT PUMPS & CHILLERS

SYSTEM DESIGN

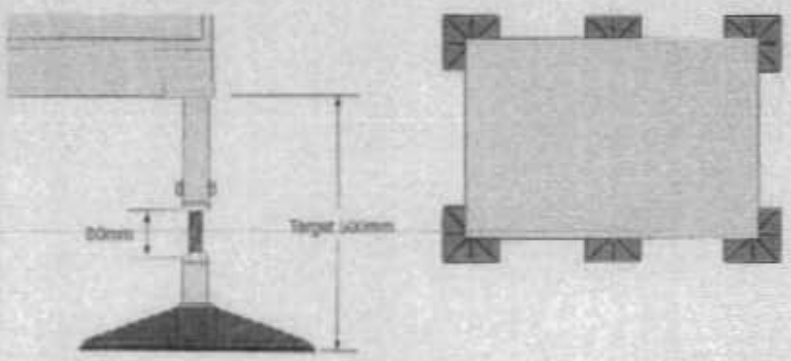
The mechanical unit support systems detailed are the most common configurations of each system for roof top applications. We will advise on selecting the best mechanical unit system and if any further design configurations are required. Information that will help us to assist you includes:

Mechanical units

- Unit dimensions.
- Weight, centre of gravity.
- Anti vibration mounting (AVM).
- Weight at each AVM location.
- Unit details.
- Access requirements.

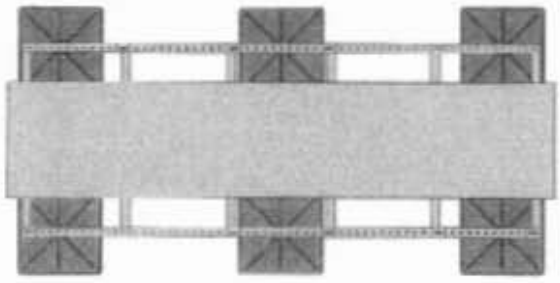
Roof

- Deck type.
- Roof structure.
- Insulation details.
- Membrane details.
- Application details.
- Structural limitations.
- Roof fall and direction.
- Obstruction details.



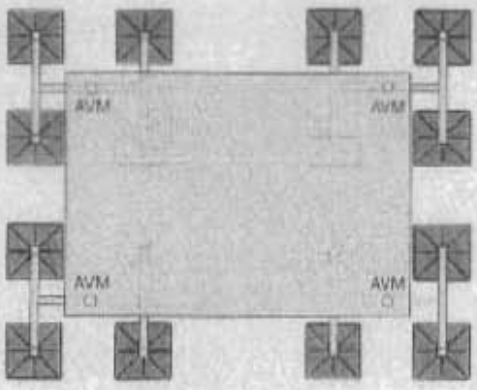
CORNER PLUS INTERMEDIATE SUPPORT

SYSTEM RP-CS-T



SUPPORT ON CONNECTING SLIDING BEAMS SPANNING ACROSS FRAMES

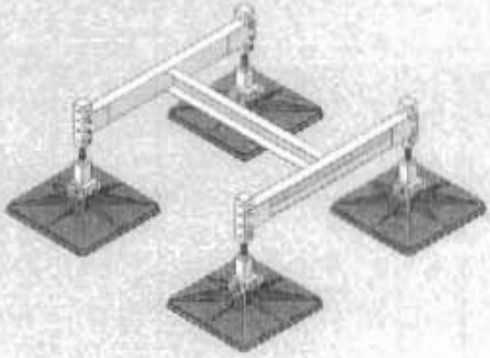
SYSTEM RP-PF-T



AVM – Anti-vibration mounting

QUARTERED SUPPORT FOR HEAVY LOADING

SYSTEM RP-POD-T





ROOF-PRO SYSTEMS
SUPPORT FOR CONDENSERS

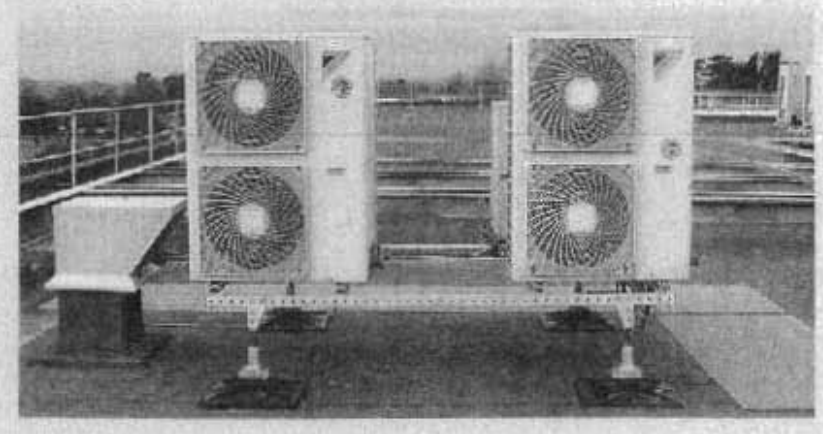
CONDENSER UNIT SUPPORT SOLUTIONS

The ROOF-PRO PF range is developed in a number of standard designs to support external condenser units. The PF range has been designed for maximum stability taking into account the weight and height of the units.

SYSTEM OPTIONS

The ROOF-PRO range of condenser supports comprises various frames and connecting slide beams to provide a flexible support system. The **PF** designs can support multiple condensers and can be used in combination for larger installations.

Each frame design supports quick and simple installation requiring no drilling or on-site fabrication, just standard fixings. Standard design options are available, or we can design a support system to suit.

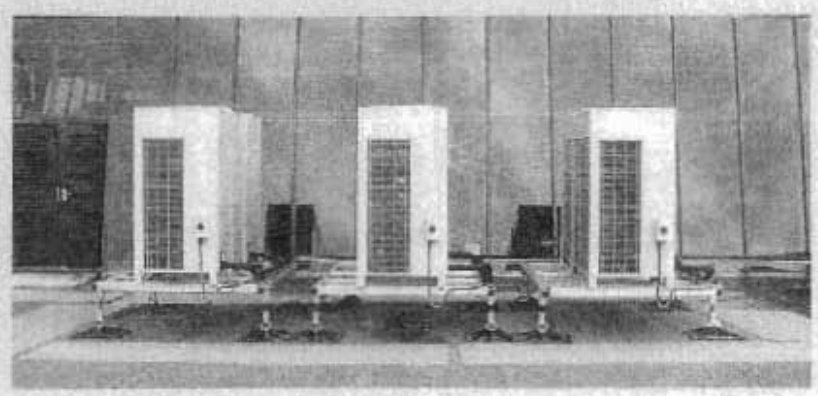












ROOF-PRO SYSTEMS
SUPPORT FOR CONDENSERS

SYSTEM DESIGN

The condenser unit support systems detailed are the most common configurations of each system for roof top applications. We will advise on selecting the best condenser support system and if any further design configurations are required. Information that will help us to assist you includes:

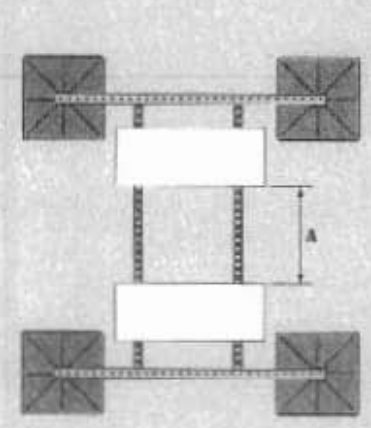
Condensers

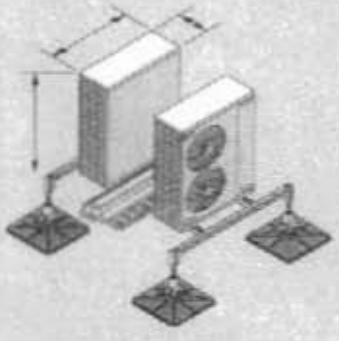
- Unit dimensions (L x W x D)
- Weight/centre of gravity
- Target height (critical for wind loading appraisal)
- Operating distances

Roof

- Roof construction
- Insulation details
- Membrane details
- Structural limitations
- Roof fall and direction
- Obstruction details

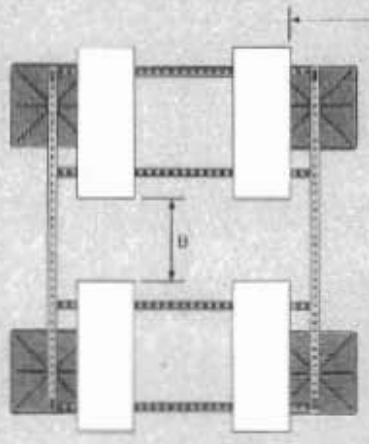
TYPICAL ROOF-PRO STANDARD DESIGN ASSEMBLIES

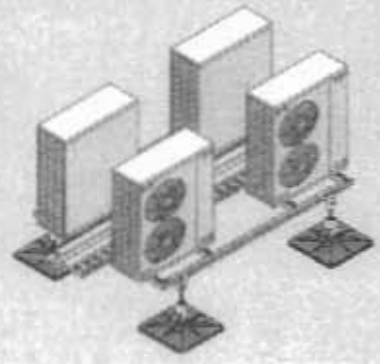




SYSTEM PF-1-T

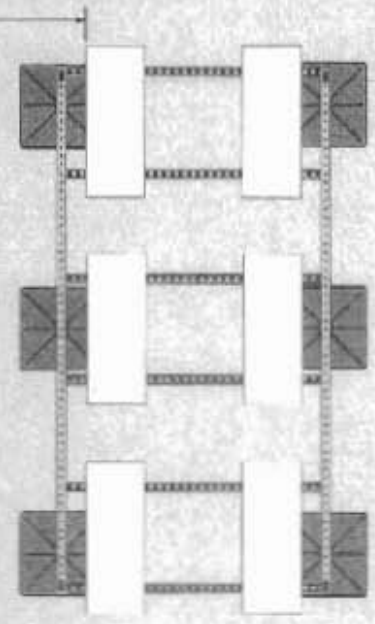
Single or two condensers back to back

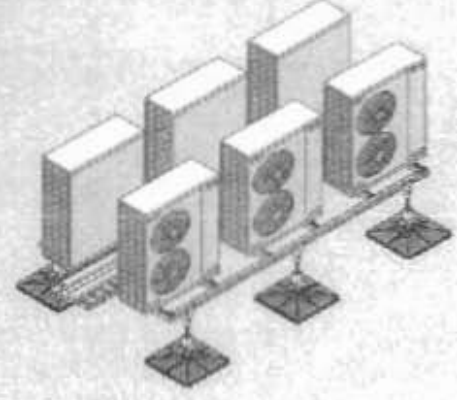




SYSTEM PF-2-T

Two or four condensers back to back





SYSTEM PF-3-T

Three or six condensers back to back

ROOF-PRO SYSTEMS
WALKWAYS, STEP-OVERS AND ACCESS PLATFORMS

ACCESS SYSTEM SOLUTIONS

The ROOF-PRO range of access solutions is engineered to aid workers' safe passage over or around service equipment on flat roofs. Each system is designed to BS 5395 and the requirements of the roof layout, with non-penetrative support bases providing stability and flexibility.

WALKWAYS

Walkway designs provide personnel protection from trips and falls around service equipment and parapet edges. The installation is customised to the roof layout offering unimpeded pedestrian access to congested areas. Walkways are fabricated to include guard rails and open mesh flooring made from galvanised mild steel. Each design includes ROOF-PRO support bases to provide easy positioning and levelling.



STEP-OVERS

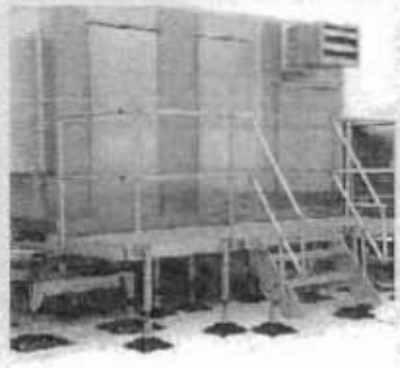
The ROOF-PRO step-over solutions provide personnel free movement around the roof overcoming impeding features that may cause injury. Each step-over is engineered to the particular requirements of the roof and designed to comply with BS 5395. There is no concern for penetrative fixings or trying to get the step-over level. The ROOF-PRO pivot and threaded support bases can be adjusted on site and moved easily for maintenance access.



ACCESS PLATFORMS

For servicing plant and equipment we can design maintenance access platforms that work with your mechanical units so as to allow engineers unimpeded access that is secure and stable.

Produced from hot dip galvanised components, the freestanding platform caters for on-site levelling via the threaded bases elevating the platform to the required height.



ROOF-PRO SYSTEMS

WALKWAYS, STEPOVERS & ACCESS PLATFORMS

SYSTEM DESIGN

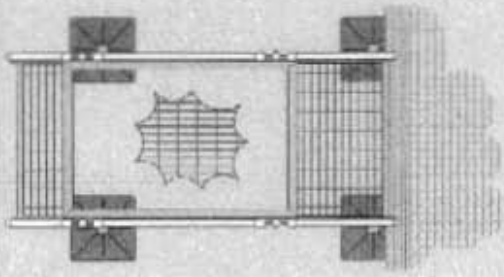
The access systems detailed are the most common configurations of each system for roof top applications. We will advise on selecting the best access system and if any further design configurations are required. Information that will help us to assist you includes:

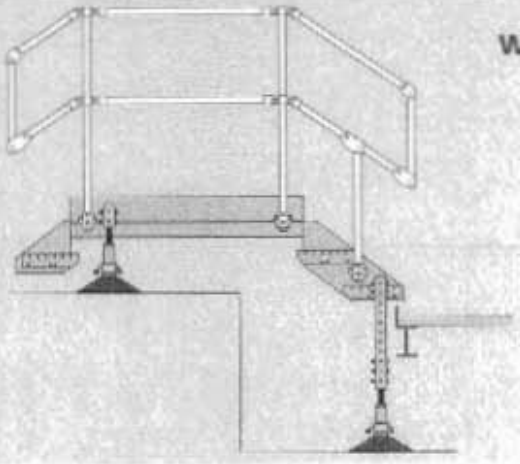
Access

- British Standards requirements
- Target heights
- Dimensions
- Obstructions
- Density of traffic

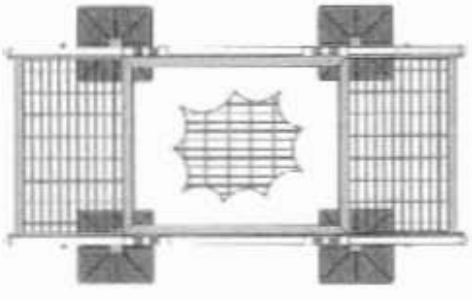
Roof

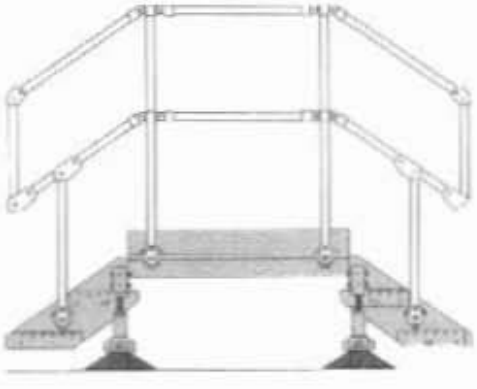
- Structural limitations
- Roof fall and direction
- Construction details



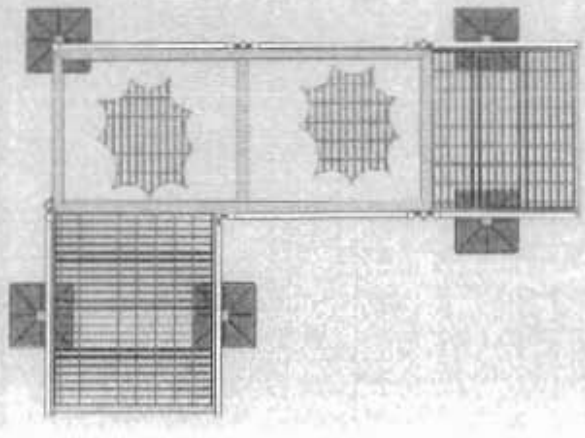


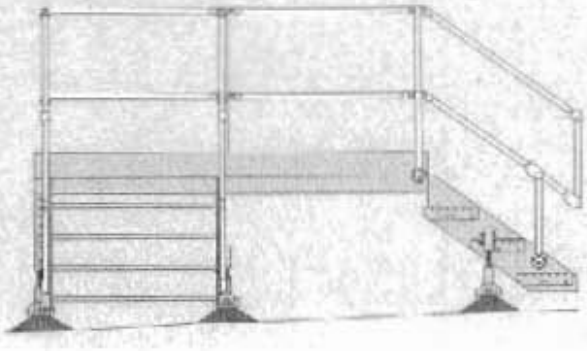
WALKWAY



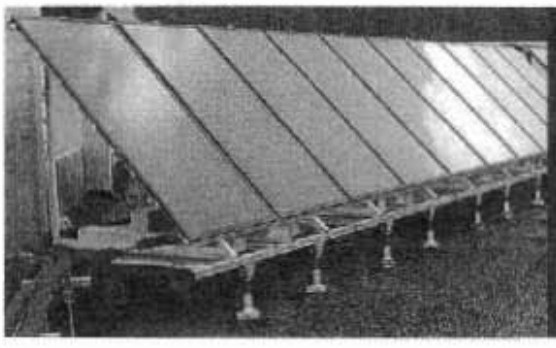


STEP-OVER



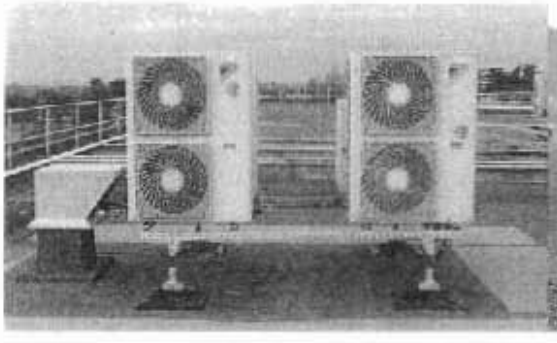


ACCESS PLATFORM

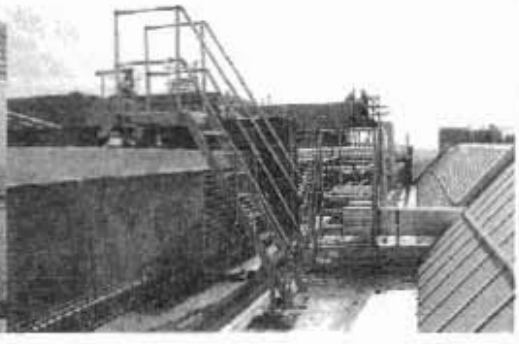


ROOF-PRO

SYSTEMS







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APPLIED
REC'D 10 MAR 2009
INST REC'D | DATE
ACTION