



The Tapered **Roofing Experts**

SINGLE-LAYER FLAT ROOFING DESIGN
IN-HOUSE MANUFACTURE
DELIVERY AND ON-SITE SUPPORT

GRADIENT



AS THE EXPERTS IN **SINGLE-LAYER TAPERED ROOFING**, GRADIENT OFFERS YEARS OF EXPERIENCE AND UNPARALLELED TECHNICAL EXPERTISE TO ENSURE YOUR **BESPOKE** TAPERED ROOF IS THE MOST EFFICIENT, **ECONOMICAL AND COST EFFECTIVE** SOLUTION FOR THE JOB.

Gradient brings style and expertise to your tapered roofing system

WHAT WE DO

At Gradient, we work closely with our customers to design, manufacture and advise on the installation of bespoke, single-layer tapered roofing solutions. It's a turnkey service that provides everything from initial consultation and design to after sales support. By controlling the whole process from start to finish, we are able to exercise quality control standards for design, manufacture, performance and sustainability that are unmatched in the industry. The benefits we pass on to you are in the form of a better conceived, better performing, better value flat roof that complies with all the relevant legislative standards.

HOW WE DO IT

Quite simply, we take pride in delivering quality, individually designed roofing systems that meet customers' precise specifications and exceed their highest expectations. We know how important it is to provide a service that is as personal as it is professional. So throughout the duration of your project, our team will always be on hand to ensure a snag free, 'right first time' experience. We are also keen our customers come to see us as the open, honest and approachable partner. As a company, we are committed to conducting our business in a fair and ethical manner and to treating our staff, customers and suppliers with equal courtesy and respect. On a global scale, we are determined to limit the impact of our activities on the environment by cutting waste and emissions wherever we can and pursuing a greener, more sustainable business agenda.

Service benefits



SITE SURVEY

Working with partners to deliver a seamless and complete process from design to installation.



DESIGN

Experienced design team assigned to every project from initial brief to final installation.



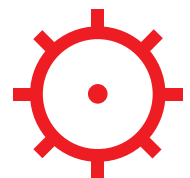
PRODUCTION

Manufactured in the UK with the most advanced equipment, guaranteeing customers a proven, reliable solution everytime.



DELIVERY

Nationwide on-site delivery, with a fleet of flatbeds, curtain-sider and tail lift vehicles.



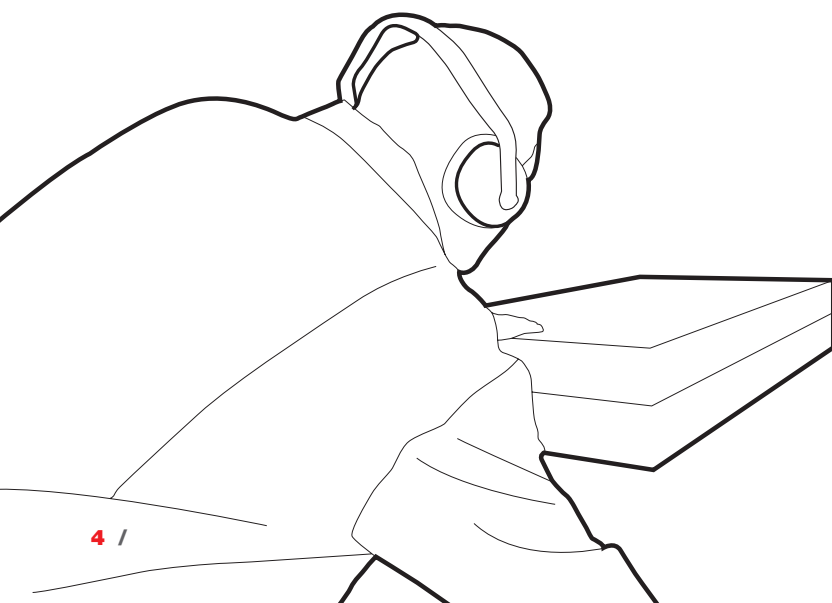
ON-SITE TECHNICAL SUPPORT

Comprehensive technical service and advice before and during installation.



Why choose a **single-layered system?**

THE SINGLE-LAYER SYSTEM OF TAPERED ROOFING PROVIDES A **QUICKER, MORE ACCURATE AND MUCH MORE FLEXIBLE** WAY OF ACHIEVING THE PRECISE THERMAL PERFORMANCE AND DEGREE OF FALL FOR YOUR ROOFING PROJECT THAN MULTI-LAYER METHODS.





WE'RE COMMITTED TO CONDUCTING OUR BUSINESS IN A FAIR AND ETHICAL MANNER AND TO TREATING OUR STAFF, CUSTOMERS AND SUPPLIERS WITH EQUAL COURTESY AND RESPECT.



BEST PERFORMANCE

Gradient work with some of the most advanced and versatile materials available to produce roofing solutions that constantly push the boundaries of performance.



SAVES TIME

Single-layer tapered roofing systems provide a quicker, more accurate and more flexible way of achieving a thermal performance combined with a degree of fall for roofing projects.



MORE PRECISE

Gradient continues to set the standard for off-site manufacture allowing the finest tolerances to be met, ensuring a perfect fit between roofing components and speeding up set out and installation on site.



LESS WASTE

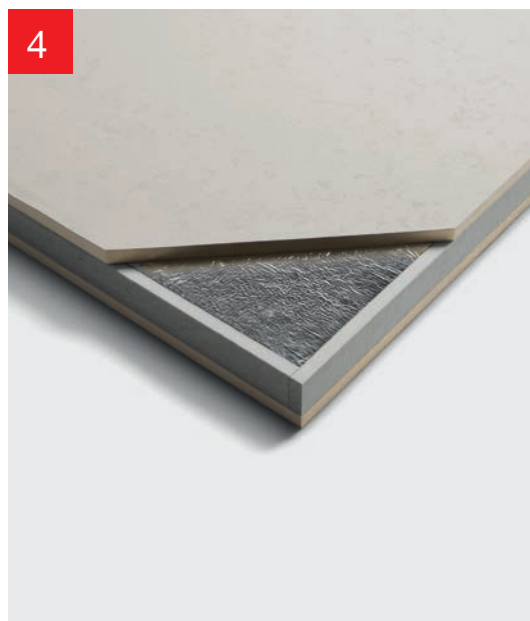
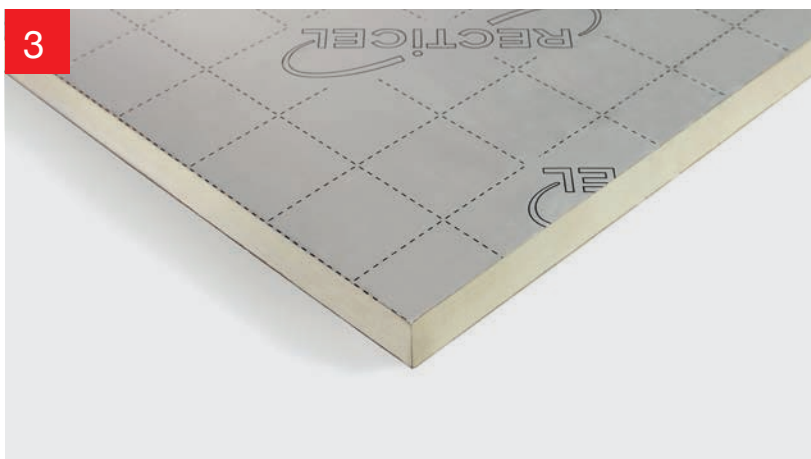
Single-layer boards are delivered in exactly the right size, which reduces wasteful cutting and trimming of materials on-site.



UNPARALLELED EXPERTISE

As experts in single-layer tapered roofing solutions, Gradient offers unparalleled technical expertise to ensure your bespoke roofing solution is the most efficient, economical and cost effective solution for the project

Our Materials



GRADIENT WORKS WITH SOME OF THE MOST **ADVANCED AND VERSATILE MATERIALS** AVAILABLE TO CREATE **EFFECTIVE, INNOVATIVE TAPERED ROOF SOLUTIONS** THAT CONSTANTLY PUSH THE BOUNDARIES OF **PERFORMANCE AND VALUE**.

1 **Powerdeck® F**

An insulation board incorporating a closed cell rigid PIR (Polyisocyanurate), foam core, faced on both sides with a perforated mineral coated glass fibre tissue.

2 **Powerdeck® U**

A PIR foam board with a special torch-receivable bituminous facing, covered with a protective and sacrificial polyethylene layer.

3 **Eurothane® Eurodeck**

A foil-faced PIR board offering a high degree of thermal efficiency for mechanically fixed single-ply membranes.

4 **Deck-VQ®**

An encapsulated Vacuum Insulation Panel (VIP) for flat roofs and terraces with a thermal performance of the core of $\lambda 0.006\text{W/mK}$.

5 **Plylok®**

A high performance PIR foam bonded to a 6mm plywood top layer. This structural decking product is ideal for vertical applications and suited to many types of roof design. It will also accept mechanical membrane fixings.

6 **Mineral Wool PIR**

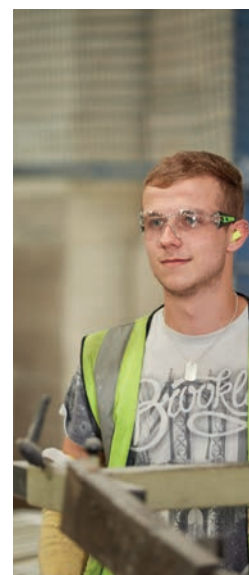
A composite insulation board which offers the benefits of both mineral wool and a high performance PIR foam. Lightweight and easy to handle, it has an outstanding compressive strength plus excellent fire resistance and acoustic properties.

OTHER MATERIALS

Gradient can use a variety of other materials to create bespoke layer solutions for individual projects. These include:

- **MINERAL WOOL** Available in a range of densities mineral wool has excellent fire and acoustic performance characteristics. It also allows great flexibility in roof design.
- **PERLITE** Can be laminated to a high performance PIR foam core to create a composite solution designed for torch-on applications.
- **EXTRUDED POLYSTYRENE** Suitable for both inverted and composite applications, this is available in both flat and tapered versions.
- **EXPANDED POLYSTYRENE** This is available in a range of composites and facing materials to suit a wide variety of different applications, including tapered roofing.
- **GRADIENT CORK BOARD** Fire resistance, moisture resistance and good acoustic insulation are key characteristics of this product. The ultimate in environmentally-friendly insulation, cork board is perfect for use in fully bonded bituminous applications.
- **GRADIENT CORK PIR** Combining the benefits of natural cork with a high performance PIR foam, cork PIR is intended for use with bonded bitumen membranes. The cork heat sink layer is ideal for fully bonded applications.

Manufacturing and supply chain



All Gradient tapered roofing systems are manufactured in the UK, using processes that have been refined and improved across our 35 years as a leading provider of roof insulation systems. Our constant policy of investment and innovation means we don't just keep pace with developments in materials and manufacturing technology, in many cases, we dictate it. That is why we have a long list of industry firsts to our name, including pre-cut mitres, the use of single-layer sections and the development of composite Rock/PIR insulation boards. All groundbreaking innovations in their time that are now widely integrated as standard practice in roof system manufacture.

By combining the highest quality materials and the latest in advanced manufacturing equipment, we are able to exercise a level of quality control that guarantees customers a proven, reliable product with complete traceability for every last item.

SUPPLY CHAIN AND DELIVERY

The Gradient logistics network offers nationwide on-site delivery wherever and whenever you need it. We operate a flexible fleet of flatbed, curtain-sider and tail lift vehicles that gives us the ability to phase delivery times according to contract schedules.



GRADIENT

INSULATION SOLUTIONS



BY COMBINING THE HIGHEST QUALITY MATERIALS AND THE LATEST IN ADVANCED MANUFACTURING EQUIPMENT, WE ARE ABLE TO EXERCISE A LEVEL OF QUALITY CONTROL THAT GUARANTEES CUSTOMERS A PROVEN, RELIABLE PRODUCT WITH COMPLETE TRACEABILITY FOR EVERY LAST ITEM.





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Our Services for Specifiers



BESPOKE DESIGN

The Gradient service is one of teamwork and close co-operation with customers, from the very first conversation to the final installation. It starts with an initial consultation, during which our experienced design team will discuss the unique requirements and specifications of the job with you. Then, we will draw up first stage plans taking into account critical factors like drainage courses, roof fall, thermal calculations, condensation risk analysis and height restrictions. Once these have met with specified approval, we turn them into a wholly bespoke tapered roof design and manufacturing package that represents the most practical, efficient, cost effective and compliant answer to your individual project requirements.

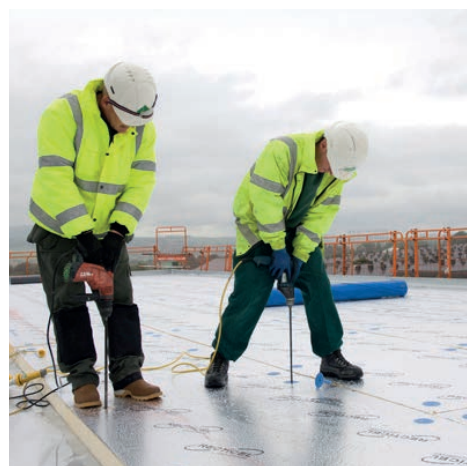
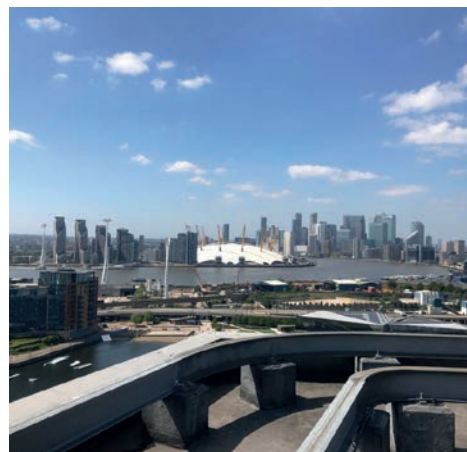


THE MITERED JOINT

Pre-cut mitre joints, a breakthrough innovation when they were brought to market by Gradient, offer enormous flexibility in bespoke roofing system design. They allow individual pieces of insulation to be produced and positioned with pinpoint accuracy, each one fitting into a specific place on the roof with minimal cutting required. As a result, they simplify the task of insulating awkward or unconventional roof areas and speed up the installation processes while lowering material and installation costs.



Our Services to contractors



At Gradient, we look on design and installation as a seamless process rather than two distinct and separate functions. That is why our collaboration with contractors begins long before the roof system itself is delivered. Our team will make site visits to discuss the installation and to ensure complete accuracy between the dimensions on the drawing board and the 'real life' measurements of your building for the best possible fit and performance. In refurbishment projects, we will take detailed measurements and core samples to assess the suitability of the existing build and roof deck.

We will also survey for backfalls and potential ponding problems, designing underlay schemes to correct and facilitate water run-off. Then when it's time to begin installation, we will be there to help you with the set out and planning to make things quicker and easier all round. Even after your roof system is installed, you can call on our Technical Service team for follow up support and advice on any issues that arise with your Gradient tapered roofing system.

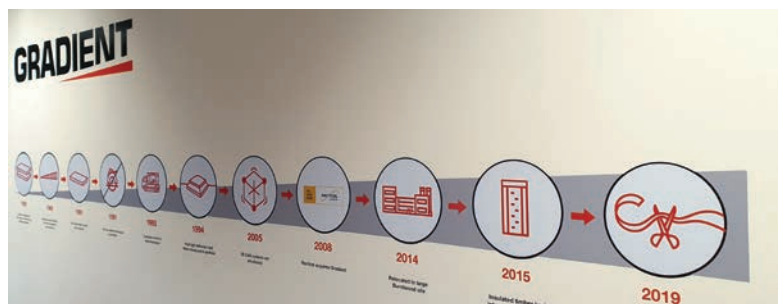
Gradient Training Centre



The latest addition to our portfolio is the Gradient Training Centre. This recent innovation is designed to demonstrate best practice in a range of flat roofing applications.

Based at its manufacturing HQ in Burntwood, Staffordshire, the educational hub is committed to instilling visitors with the highest standards of roofing installation and safety through a range of expertly-delivered theoretical training and practical exercises.

Due to its central location making it easily accessible to attendees from all parts of the country, the Gradient Training Centre is the ideal assessment facility for the construction industry. It comprises a presentation area for demonstration purposes, which accommodates over 50 people per session, and a practical area for trainees to work with products themselves.



The Gradient commitment to sustainability



PLANT SUSTAINABILITY

We operate a production process that limits as far as possible our CO₂ emissions and minimises the volume of waste created. Indeed, one of the major environmental benefits of off-site fabrication is that offcuts can be recycled without ever leaving the factory. We also look for responsible environmental agendas in our suppliers and liaise closely with our customers to formulate appropriate waste management plans for each project.



SUSTAINABILITY ON-SITE

Through careful planning of deliveries and prudent use of materials, we can help you reduce the environmental impact of your project while improving its thermal performance and long-term sustainability:

- Efficient packaging methods allow us to deliver more insulation boards to site in a single trip, reducing emissions and congestion on the roads.
- Because boards are set out from roof high points, any square cuts are made at the thinner end, resulting in a lower volume of offcuts.
- The provision of half boards and the use of infills in roof design further reduces waste.
- Pre-cut mitered joints make maximum use of available board area and aid accuracy in installation

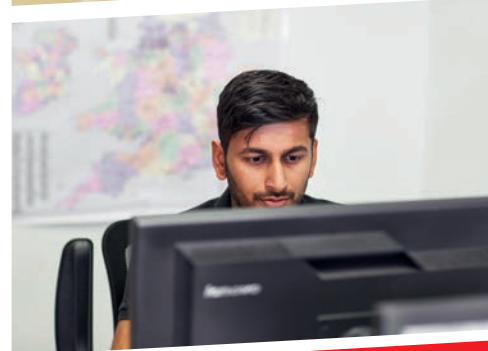
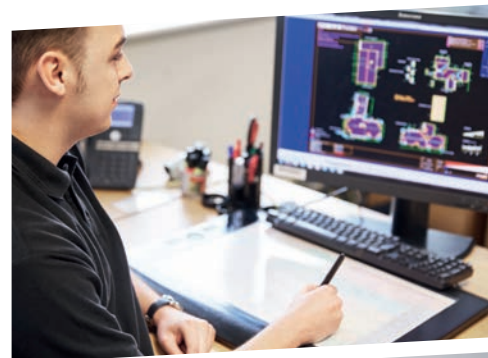


THROUGH CAREFUL PLANNING OF DELIVERIES AND PRUDENT USE OF MATERIALS, WE CAN HELP YOU REDUCE THE ENVIRONMENTAL IMPACT OF YOUR PROJECT WHILE IMPROVING ITS THERMAL PERFORMANCE AND LONG-TERM SUSTAINABILITY.

AS A BUSINESS, GRADIENT
PUTS SUSTAINABILITY BEST
PRACTICE AT THE HEART
OF ITS OPERATIONS, BOTH
IN THE MANUFACTURING
PROCESS AND IN THE
MANAGEMENT OF WASTE
ON-SITE.



GRADIENT



FOR MORE INFORMATION ON
HOW WE CAN HELP YOU AND
YOUR PROJECT, OR IF YOU HAVE
A SPECIFIC TECHNICAL QUERY,
CONTACT US VIA OUR TECHNICAL
HELPLINE ON **01543 678777**.

Issue date: August 2020

GRADIENT UK

Unit 5
Zone 4
Burntwood Business Park
Staffordshire WS7 3XD

Email: **sales@gradientuk.com**

Phone: **01543 678777**



@Gradient_UK



Gradient UK