



# environmental sustainability pledge 3 years on



**GRADUS**  
contract interior solutions



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**“ To meet our present business needs without compromising our long term future environment ”**

## introduction









At Gradus we recognise the importance of sustainable development within our business, and are dedicated to controlling and minimising the effects we have on the environment.

We have a firm set of environmental objectives providing a dedicated approach to sustainability in areas such as legislation, waste, training and recycling.

Fully accredited to ISO 14001:2004 we can demonstrate these processes and also evaluate any environmental impacts that may result from our activities, products and services.

At Gradus we will, therefore, continue to improve our environmental performance in line with our aspirations to be recognised as a world class company.

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# environmental objectives



This displays the interaction between our environmental objectives and our seven key elements of sustainable development. Environmental objectives are set for each area of sustainability, e.g. Land Use, Buildings etc., and progress is subsequently monitored to ensure we are meeting the targets we set ourselves in order to become a more environmentally friendly company.

# land use



At Gradus, one of our main objectives in running the business is to be a good neighbour by ensuring the ecological and environmental impacts of our properties and surrounding land is minimised.

We have developed a long term strategy to regenerate surplus land taking into account the views of the local community.

## we are committed to...

- Significant regeneration of land to improve the physical environment for the wider local community
- Enhancing the local river to benefit wildlife and improve area of natural beauty
- The provision of an affordable housing scheme within the conservation area

Since June 2006 Gradus has reduced its number of sites within Macclesfield Borough from 8 to 5.

Key contributions from this are as follows:

- Close work with the planning authorities, highways and the environmental departments to establish how our development plans could make an important contribution to the community
- Plans accepted that regenerate surplus buildings [including listed buildings] and enhance our local river banks through the development of a walkway and a linear park
- Recycling of a 'brown field' industrial site into a key worker housing scheme
- Expansion of Accessories manufacturing, consolidated into a purpose built and designated site
  - ~ Reduction in noise pollution from the cessation of production that was closer to the community
  - ~ Full refurbishment of two further sites following this consolidation
  - ~ A cleaner environment through the eradication of solvent based adhesives at the new site
  - ~ Cancellation of licenses at the end of 2006 which were originally granted to use solvent based products no longer required by Gradus



# buildings

We made a commitment that our new buildings would incorporate environmental improvements such as improved building design and capital equipment plans, which will increase energy efficiency and reduce environmental waste. Significant improvement plans are also in place for our existing buildings and those buildings that have reached the end of their useful life for Gradus.

## totally dedicated to...

- The regeneration of our under-utilised / end of useful life buildings
- Improving building design to increase energy efficiency and reduce environmental waste
- Realising the impact of our buildings upon employees, neighbours and the environment and taking measures to ensure effects are minimal
- Establishing alliances with the regional council to complete ecological audits
- Revitalising listed buildings of historical importance



## Since 2006...

- Our new buildings and capital equipment have been installed with significant environmental improvements
- Consolidation of production processes into one purpose built site
  - ~ Coordinated despatches – eradicating the need to transport materials across the town
  - ~ A cleaner, less polluting environment situated in a purpose built industrial estate away from the community
  - ~ Our listed Head Office to become an anchor site for a tasteful, mixed development feature in the centre of Macclesfield
- Significant investment has been made in new capital equipment, which has provided improvement in energy and utility usage at our new Springbank facility
  - ~ Energy [heating and lighting usage]
  - ~ Waste reduction, recycling, raw material usage, water recycling and low risk to pollution
  - ~ Health and safety
- Re-accreditation with ISO 14001 : 2004 Environmental Standard

# raw materials



Gradus will continue to have a sound sustainability policy with all of our like-minded strategic suppliers. We aim to ensure products are manufactured to meet stringent environmental objectives without unnecessary waste. To this effect we have established process improvement programmes to reduce consumption, improve the formulations and reduce energy usage in processing them.

## we are focused on...

- Establishing partnerships with like-minded suppliers
- Investing in new equipment
- Developing environmentally friendly raw materials
- Pro-active measures to ensure products consider codes of environmental best practice, e.g. Green Ratings
- Implementing comprehensive training programmes
- Minimising the uses of components during the new product development process

## Since June 2006 we have achieved the following improvements in conjunction with our suppliers:-

- Annual Supplier Audits – like minded ISO 14001 : 2004 suppliers
  - ~ Raw material development with environmental benefits, e.g. the removal of contentious metal compounds such as lead in PVC
  - ~ A universal UPVC grade has been established to reduce waste
  - ~ Business continuity plan to provide credible alternatives for those categorised as being at risk
  - ~ Collection of our main raw materials by our own delivery trucks on their return journey. This improves our carbon footprint and reduces fuel usage
- New Product Development
  - ~ All new products are developed with the challenge to be less of an impact on the environment than the ones they replace, e.g.
    - [a] Number of components reduced
    - [b] Source of raw materials and processes to make them
- We have developed a close relationship with BRE and are actively developing our audit procedures in line with the BRE EAM Environmental accreditation
- We have established a recycling process that enables Gradus to collect the PVC backed nylon yarn carpet and convert it into a new backing material for newly manufactured product
- Since 2006 we have introduced more products that have a higher recycled content or come from a sustainable source, e.g. cork, Jaku & Kata carpet tile and Toli luxury vinyl tile
- Working with British Standards / ISO to introduce and expand development programmes for our employees

# new products to support

Gradus, like any manufacturing business can have an impact on the environment. For this reason we pledge to minimise any potentially harmful future activities and improve our sustainable business practices. Wherever possible we offer sustainable and recyclable products:-



Jaku

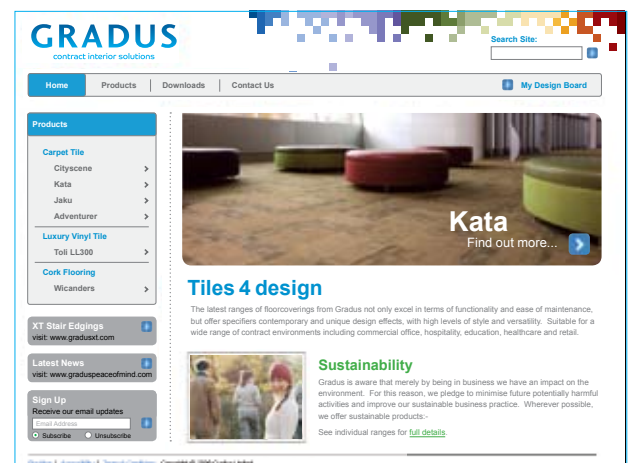


Toli

- **Jaku** and **Kata** design tiles reduce future landfill because they offer 100% cradle to cradle recycling options
  - ~ PVC backed option is fully recyclable at the end of its life
  - ~ ER3® 100% recycled backing available on request
- Gradus commits to collect these products from their location at the end of their useful life. We will return them to the place of manufacture and recycle them into backing material for new product
- **Wicanders** is sustainably sourced - produced from the bark of living cork oak trees. The bark can be farmed every 9 years without any harm to the tree

- Adventurer
- Jaku
- Kata
- Toli
- Wicanders

For further information on these and other products in our range visit: [www.gradustiles4design.com](http://www.gradustiles4design.com)





# our sustainability pledge



XT stair edgings



Tyreguard

- **XT stair edgings** designed to offer peace of mind for the owner and occupier of any public building
  - ~ Performing to the latest best practice in building regulations with regard to health and safety
  - ~ Has recycled raw material content
- **Matting** gives significant benefits in the improvement of maintenance methods in a building
  - ~ Using a high recycled content for example: Tyreguard wipers are made from 100% recycled material from aircraft tyres of which at least 50% is vulcanised rubber with and the remainder being textile material

- **XT stair edgings**
- **Matting**

Further information can be found at: [www.gradusxt.com](http://www.gradusxt.com)

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# energy conservation

Reducing use of energy through process improvement and, when appropriate, substituting with preferred alternatives.

## taking responsibility for...

- Establishing an improvement programme for water recycling and energy efficiency
- Reducing energy usage and waste through extensive investment in new equipment
- Incorporating energy saving schemes into our new building design
- Promoting continuous improvement programmes of energy reduction and the impacts they will have on efficiency
- Ensuring energy conservation features heavily in new employee induction programmes and ongoing training



## Since 2006 we have introduced a number of process improvements that contribute to our commitment to the reduction of energy consumption

- Closed loop cooling system in our extrusion process that reduces energy and waste by recycling water
- Modified assembly process – less energy usage
- Fast action shutter doors to conserve heat
- All production equipment was purchased with state of the art energy conservation requirements
  - ~ Automated shut down
  - ~ Low energy blowers
  - ~ Power surge reduction measures, etc
  - ~ Air knives - energy efficient driers
- Training and development for our employees
  - ~ Weekly switch off audits [lighting / heating, etc]
  - ~ 2006/8 training on carbon emissions
  - ~ Standard operating procedures for use of production machinery, e.g. energy conservation, switch off procedures
- Development of new carpet products utilising solution dyed yarn
  - ~ 30% less energy with less waste in the process

**NB. Our new Springbank facility consumed 2.5% less energy in 2006-7 with higher output! Further improvements in 2008 have also been achieved**

# life cycle impacts & waste



One Gradus goal is to simplify processes and eliminate waste. Where this cannot be achieved it is our intention to recycle waste or, alternatively, improve the process of environmentally effective waste disposal. We are also working towards developing products that adopt a 'cradle to grave' lifecycle, taking into consideration the environmental impacts of our new product development processes and enabling an effective supply chain process for our customers and end users.

## pro active in...

- Achieving company goals, i.e. eliminating waste
- Increasing awareness and training for all employees
- Realising a year on year reduction in landfill usage
- Increasing the recycling percentage of waste raw materials, packaging and water
- Improving air quality through investment in advanced manufacturing equipment, ensuring a healthier environment for the wider community

Since 2006 we have made significant improvements in the Company goal aimed at simplifying our processes and eliminating waste

### **PVC Waste reduction by 35% - rigid PVC 20% and Flexible PVC 15%**

- 24 hour shift operation reducing downtime
- Standard operating procedures to tackle waste
- Use of external sources for post consumer PVC waste in our processes

### **Aluminium is a major raw material used**

- Major raw material used in a wide range of our products
- 70% recycled from 100% recycled billet

### **Packaging**

- All cardboard purchased has 70% recycled content
- All cardboard and wooden packaging waste is recycled
- In 2007, 74 tonnes of material was recycled therefore saving approximately 89 tonnes of carbon dioxide

- Source: Valpak Certified Audit

### **Yarn**

- All nylon yarn waste is recycled
- All polypropylene yarn is collected and recycled into underlay

### **Rubber**

- We have reduced our rubber matting scrap by 23%

### **Landfill**

- Reduction in landfill usage of [Gradus Accessories](#) was 57% from 2001 to 2005, with a further 44% by 2006. This continued to improve by 4% in 2007
- In the first half of the decade [Gradus Carpets](#) reduced its landfill usage to almost a quarter of the tonnage shipped in 2000. Since 2006 the reductions have continued by approximately 3%

### **Post consumer scrap**

- All non usable PVC scrap is now ground up and sold as raw material to the producers of lower grade PVC products, e.g. coat hangers, etc

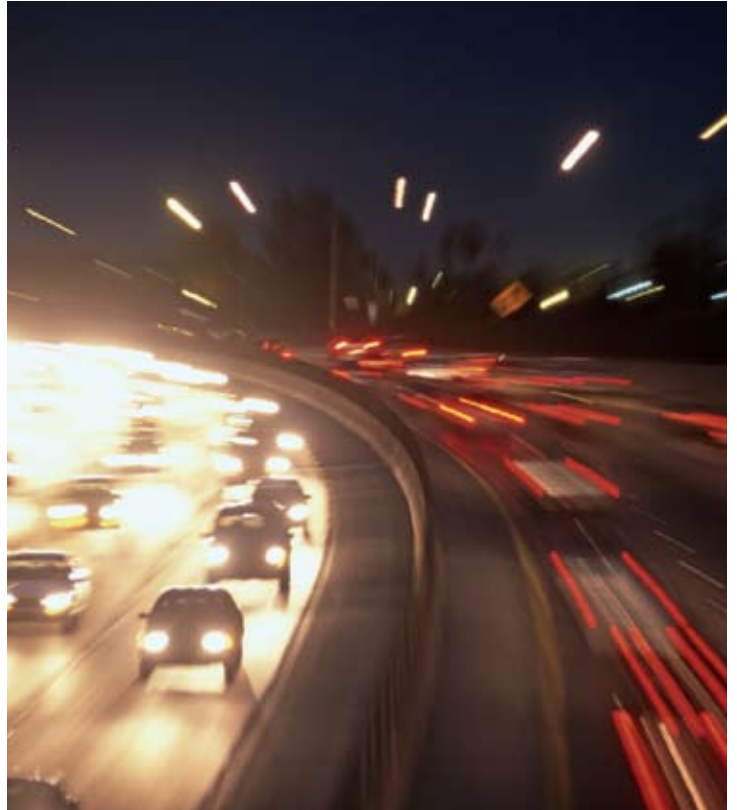


# transport

Our objective is to operate an efficient and effective transport policy that optimises costs and minimises waste, i.e. maximised loads combined with the most effective routes possible. We are committed to making our transport system the most effective we can with minimal environmental impact.

## reducing harmful environmental impacts through...

- Using environmentally friendly vehicles
- Improving energy efficiency
- Reduced emissions / reduced fuel usage
- Recycling vehicle components
- Optimising our transport routes yielding reduction in waste
- Increasing training on efficient driving



## We have made a number of important changes to the utilisation of transport since 2006

- All trucks that have been purchased by our transport provider have Euro 3 or Euro 4 engines compliant with the European Emissions Directive
  - ~ Tested every six weeks
  - ~ Drivers trained on SAFED – fuel usage efficiency
  - ~ Tracking measures on all trucks [full suite of efficiency measures]
  - ~ Custom designed trailers to maximise loads
- End of life recycling of trucks
  - ~ One brand to make all parts interchangeable so that vehicles can be stripped at the end of their useful life
- The fleet collects all major raw materials following its daily customer deliveries – halving fuel costs
- Carpets deliveries on Accessories trucks to common customers utilising empty space on the vehicles
  - ~ Over 11% of Carpet deliveries were on the daily Accessories vehicle 'Milk Run' at the end of June 2008 with an objective to increase even further by year end

# community



Gradus is building closer relationships with all the key stakeholders in the community by linking our environmental plans to their needs and requirements.

## developing relationships with...

- Neighbours
- Employees
- Local Authorities (Councils, Environment, Highways, Town Planning, etc)
- Customers

## Since June 2006 ...

- Gradus has always had a good relationship and healthy respect for its community. We have been in business for over 40 years and have always been located in the same Borough employing local people and currently expanding our workforce
  - We have been active sponsors of annual events in the Macclesfield town, such as the Fun Day and the 25th Anniversary Celebrations, which will reach many thousands of local residents and visitors
  - In addition, many of the features of our building and land use developments have been planned in conjunction with the Local Authorities to return facilities to the community
    - ~ Development of listed buildings
    - ~ A linear park along our local river
    - ~ Development of significant key worker dwellings, which has recycled a 'brown field' industrial site
  - We also conducted a full traffic survey when developing our plans to demonstrate that Gradus was reducing congestion
    - ~ Less travel in cars by individuals working for Gradus
    - ~ Programme for cyclists
    - ~ Less commuter traffic between sites, etc
- "Some external Community Measures"**
- Cheshire County Council ECO Audit
    - ~ Very low pollution rating
  - Groundwork Energy Survey / Waste Reduction Audit 2006/7
    - ~ Compliments for the new premises and the investment in energy saving training
  - Urban Trust 2007
    - ~ Positive result



# environmental assessment

## BRE Environmental Assessment Method [BRE EAM]

This is a measure of Best Practice in Environmental design and management.

Gradus has been working closely with BRE since Autumn 2007 to collect the necessary data for all its supply chain partners in the manufacture of contract carpets.

This data includes up to twelve months of production output for each designated product throughout its process, e.g:-

- Transport of material
- Consumption of fuel / energy
- Discharges of water
- Emissions in the air / water
- Waste, etc

This is a continuous process involving reviews and visits to Gradus together with all our designated partners.

It is envisaged that BRE will have the majority of its work complete by the end of 2008. This will then become an on-going review process for years to come.





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contract interior solutions

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