

Bramall Construction

MMC / Prefabrication Experience



1. Modular Pods – Wellgate Road, Conisbrough

- Three units completed off site and craned into position and then in brickwork and render
- Ten week programme
- Delivered within budget
- Zero defects
- Park Homes Manufacture



2. SIPS Panel Construction – Staghills Road, Rossendale

- Low U-Value of 0.12 achieved
- Programme reduction achieved in poor weather conditions
- Minimal Defects
- Worked well as structural system
- Maple Timber Frame



3. Timber Frame Construction (Houses) – Illingworth, Halifax

- Increased speed of construction
- Allowed client to achieve MMC requirement for Housing Corporation



4. Timber Frame Construction (Extracare) – Mytholm Meadows

- Increased speed of construction
- Complicated floor detail to achieve robust details



5. Beco – Wellgate, Conisbrough

- High U-value achieved within minimal wall thickness increase
- Concrete floors could be used therefore on flats allows simple robust detail



6. Wide Cavity Traditional Construction – Tewit Ave, Illingworth

- Construction process standard
- 300 full fill dritherm used
- High U-Value of 0.12 achieved
- Not much thicker than timber frame or Sips panel to achieve same U-Value
- First homes in the country to be assessed for, and achieve, the Code for Sustainable Homes Level 4

Bramall Construction

Renewable Fuels Experience



1. Tewit Ave, Illingworth, Halifax (Code 4 – First in UK)

- Exhaust Air heat Pump
 - No external heating or pumping and no bore holes or external works
 - Good COP of 3.0
 - Technology used for 25 years in Scandinavia
- Alpha Solar Smart System
 - Simple Water Solar Thermal System – no Glycol required
 - Minimal Maintenance
 - No duel coil cylinder
- PV Panels
 - Solar Century Tile System
 - Simple to fix
 - Zero maintenance for 15 years and then may require new inverter
 - Simple for resident to understand. They do not have to do anything as long as they are on correct fuel tariff.
- 300mm thick cavity
 - Passive Construction reduces the clients need for heating directly



2. Oakenshaw Street, Agbrigg, Wakefield (Code 3)

- Ground Source Heat Pump
 - Bore Hole



3. Wentcliffe Road, Wakefield (Code 3)

- Alpha Solar Smart System
- Increased cavity wall thickness (0.2 U Value)
- Alpha / Zenex Gas Saver
 - Pre heating of water using flue gases
 - Reduces energy used to heat water in combi system as water is heated prior to entering combi boiler
 - Appendix Q acknowledged



4. Love Lane, Pontefract (Code 4)

- PV Panels
 - Receives grant of 50% from Low Carbon Building Programme



Bramall Construction branches out into recycling

Bramall have teamed up with TP Trading to recycle domestic wooden materials such as cupboards and work tops that are stripped from people's homes as part of ongoing refurbishment work.



Bramall Construction, part of the Keepmoat group, pass van loads of excess wood onto TP Trading every month where it is either reused or converted into furniture. The aim is to boost Bramall's recycling rates and help reduce carbon emissions. Their recycling record is so impressive that TP Trading have recently gone over their 1000th collection from Bramall construction sites.

The recycled wood goes on to make items of furniture such as sheds, bird boxes or picnic tables. A proportion of the chipboard collected by TP Trading is incinerated in Doncaster and the energy is then converted to heat a local greenhouse growing organic vegetables. The wood can also be used to make lower grade chipboard, recycled timber or to repair wooden pallets which can be rolled out to the construction market.

The recycling process is an important part of Bramall's green agenda as their wooden waste doesn't end up in landfill sites. They began working with Rotherham-based TP Trading in January last year and is currently recycling excess wood on nine of its sites across Rotherham, Doncaster and Sheffield.

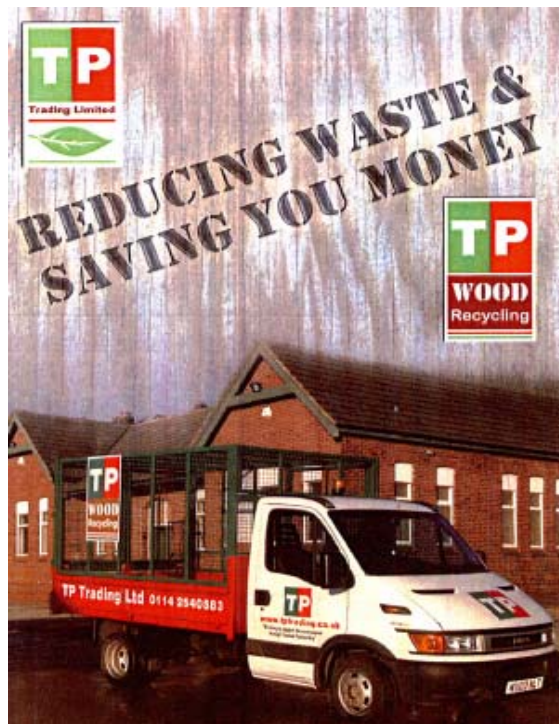
Their close working relationship with Bramall has enabled them to double their number of employees to eight who come up through the Government's New Deal scheme.

Ian Stacey, Bramall Construction's Chief Planner, said: "Environmental issues are one of the top priorities for Bramall Construction and I think our strong relations with TP Trading clearly reflects this and helps us meet our timber recycling targets. Looking at how we can minimise damage to the environment and maximise sustainability are important to Bramall. Wood recycling is just one small part of what we do to achieve this."

Bramall Construction is currently TP Trading's biggest customer and have plans to expand the company and introduce the recycling initiative to other major clients. Nic Marshall, the Managing director for TP Trading, said: "We have been working with Bramall Construction for 18 months and it's fair to say that they take environmental issues very seriously.

"Our strong working partnership with Bramall ensures that we are there on a daily basis to collect any excess wood produced on their sites so that none of it ends up on landfill. It's a fantastic environmental initiative and it's very clear to see that Bramall has very strong green credentials and a strong green agenda. Without Bramall, we wouldn't be able to take anyone on from the New Deal programme and so we are very grateful for their support, especially during the early days when we were just starting out. We have now got eight employees working for us through the New Deal scheme but we'd have to let them go if it wasn't for our ongoing contracts with Bramall Construction, our biggest client."

2000 tonnes of wood saved from landfill!..... and five new jobs created!



Name: Ian Stacey
Position: Chief Planner

Case Study

Bramall Construction Pilots success in Buying Recycled



Bramall Construction pilot recycled products on a project to build 12 new houses.

Bramall Construction specialises in the construction and refurbishment of social housing. As part of the larger Keepmoat Group the organisation already has a commitment to corporate social responsibility and Bramall were keen to extend this to their procurement processes using the Buy Recycled programme.

House that?

Bramall Construction focused their efforts on a project to build 12 new houses in Wakefield on behalf of Wakefield District Housing. The project costs were already agreed with the client, so the challenge was to make changes without impacting on the overall budget.

Research based on a list of materials needed for the project produced a large number of potential recycled products and Bramall were delighted when the first switch they made also saved them money. A change to 100% recycled foundation blocks meant a saving of £121.80 over 12 houses on the previous product used. It also resulted in CO₂ savings and diverted 47 tonnes of waste from landfill.

The change will mean a larger overall saving to Bramall as they will build approximately 200 houses over the

coming year which will require around 48,200 foundation blocks. This provides a saving of over £2,000 over the coming year together with 785 tonnes of waste diverted from landfill and CO₂ savings.

A range of other recycled content product options will be investigated from kitchens to ceilings, bricks to blocks, roof tiles to floor tiles, but as the buildings are just emerging from the ground it has not been possible to evaluate the total impact over the whole scheme for this case study.

Following this project Bramall have adopted a minimum recycled target of 15% for all of their new build construction and are currently evaluating what percentage would be appropriate for their refurbishment work.

Once the Wakefield development is built it will be used as an example for the wider Keepmoat Group and recommendations about standard products with maximum recycled content such as foundation blocks, plasterboard and roof tiles will be made across the whole organisation.

Bramall also wrote to its core suppliers and sub-contractors telling them about its involvement in the Buy Recycled programme and asking for their support. This ensured they were empowered to recommend any products they were aware of and would understand the reasons behind any changes in standard specifications or product lists.

TOP TIPS

- **Understand your starting point in order to be sure you are setting realistic targets and are able to improve. You might be surprised to find out how many recycled products you are already using.**
- **Talk about your success. Ensure the rest of the organisation can benefit from the process you have been through. Although Buy Recycled has been piloted on one project, the impacts could be huge if changes are adopted by the wider Bramall and Keepmoat Group.**
- **Compile a list of your top five or ten key products with a maximum recycled content which can become standard e.g. plasterboard, foundation blocks, insulation, roof tiles. These should be products used on most of your projects and which are easily available at acceptable cost. Ensure this list is passed on to all relevant subcontractors with instructions to use these products instead of any others.**



Recycling Action
Yorkshire



www.recyclingaction-yorkshire.org.uk



When you have finished with this leaflet please recycle it!

75% recycled

This leaflet is printed on 75% recycled paper.

Recycling Action Yorkshire (RAY)

Environmental savings

- Diverted 47 tonnes of waste from landfill
- Saved £121

Figures correct at March 2008

Background to the Hands On Support process

The Buy Recycled Programme actively encourages the public and private sector to buy recycled content products that will in turn create a demand for recycled materials and develop the market's commercial viability.

The primary aim of Buy Recycled is to assist organisations to buy recycled content products and integrate sustainable procurement into their everyday purchasing decisions.

Buy Recycled has provided tailored 'Hands on Support' through a high impact, specialist support programme to more than 30 organisations across the region. A baseline is established which looks at the policies, products, spend, departmental focus, internal and external communications. The baseline assessment is then used to develop a Buy Recycled action plan for each organisation which highlights priority opportunities.

RAY then provides practical one to one advice and support in the delivery of this action plan, including linking with other RAY project managers work streams. To ensure sustainable procurement is integrated into the everyday purchasing decisions of these large organisations the 'Hands on Support' also delivers a "train the trainer" workshop for each organisation, to support and encourage full roll out.

Challenge	Solution
Sticking to the original budget.	Many of the products have been sourced at equivalent or lower prices. This has off-set any price increases.
Setting a realistic recycled content target.	Spend time properly analysing your baseline. Only by understanding current practice and thoroughly investigating the products available will you be able to set a realistic target.
Sourcing suitable products.	Use the RAY & WRAP product databases. Speak with existing suppliers about wanting to increase recycled content and ask what alternatives they stock.

Contacts

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Further resources

www.buyrecycled.info
buyrecycled@recyclingaction-yorkshire.org.uk
www.bramall.com



Contact:

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 T: 0113 237 8400 F: 0113 237 8488

Or fax back...

Name: _____ Job Title: _____
 Company Name: _____ Nature of Business: _____
 Address: _____
 Telephone Number: _____ Email: _____

I would like RAY to contact me to discuss future projects: (please tick)

