



3<sup>rd</sup> December 2008

## **Morpeth Floods – Castle Morpeth Housing**

On Saturday 6<sup>th</sup> September 2008, Morpeth situated in Northumberland, was the victim of serious flooding, after the River Wanbeck, which surrounds the town, burst its banks.

Many businesses in and around Morpeth's town centre were forced to close after the devastating floods took place. However, it wasn't just the local businesses that suffered. Many families were affected by the floods also, with the river's waters entering over 1,000 homes.

Of the 1,000 homes affected, over 130 of these belonged to Castle Morpeth Housing.

The Housing Association / Loss Adjusters appointed Davis French Associates as an independent advisor to help advise them on the best way forward for the drying programme. Davis French Associates then contacted The Revival Group, and a manager; Richard McLean, visited the houses in question.

Following Richard McLean's visit to the properties, Davis French Associates then put a proposal together which advised that Revival's Hydrothermic Drying system would be the best approach to take.

All the houses had suffered flooding, this being either just a few centimetres to a maximum of 5 feet of water. For those seriously affected the occupants were forced to move in with friends, relatives, or in instances that this was not possible Castle Morpeth Housing re-housed the families as best they could.

Castle Morpeth Housing were clearly concerned about the damage that the floods had made, and needed them dried out quickly, so that families could get back to their everyday lives as soon as possible.

Mears and Frank Haslam Milan, the main contractors for the restoration project employed The Revival Group's services following Davis French Associates recommendations. Mears and Frank Haslam Milan then proceeded to carry out the strip out and the reinstatement works on the properties, whilst Mike Reynolds of Faithful & Gould was brought in to oversee and cost the entire project.

Commenting on the work needed to be done, Revival's manager, Richard McLean, said: "I met with the client, Tina Drury from Castle Morpeth Housing and it was evident that her prime focus was getting the occupants back into their houses as quickly as possible. Because of this, and because of the sheer volume of houses, we allocated 8 Hydrothermic Drying systems to carry out the project."

The Hydrothermic Drying Systems provide a much quicker system for drying buildings than has ever been previously available, by bringing the temperature of a building to a very high level, using hot air.

Richard and his team set to work almost immediately. One Hydrothermic Drying system would dry out two houses at a time, and would take just 4-5 days to do this. "For those seriously affected they will be back in their homes before Christmas, all thanks to the excellent drying systems, and my teams hard work. And for those other occupants less affected, many have not had to leave their homes or are already moved back in following our systems drying their homes." says Richard.

Richard and his team of four are onsite most days. Richard would then bring in more members of his team to move the systems onto the next houses that need drying, which would result in 10-12 Revival members spending a full day moving the high-tech equipment.

To date Revival have spent 8 weeks on the project, and are already three quarters of the way through, saving the insurers a vast amount of money, making savings on the cost of demolition, reinstatement, alternative accommodation and drying, as well as allowing Castle Morpeth's tenants to either remain in their properties, or move back in, with only having to spend a limited time out of their homes.

Tina Drury, Managing Director, Castle Morpeth Housing, says: “Revival have been fantastic. Through using their services, and in particular their Hydrothermic Drying systems, we have kept the residents very happy in what has been a very distressing time for many. I’d like to thank Richard and all his team for the hard work that they have done, and being so flexible and occupying whilst working with the other companies that are also involved in the restoration process.”

“I agree,” adds Mike Reynolds of Faithful & Gould, who is overseeing the whole project. “I can’t fault Revival’s work ethic one bit. Throughout this project so far, they have proved themselves to be a very reliable team, who deliver on their promises.”

### **How cost effective is Hydrothermic drying?**

Based on the above case study please see below a table outlining the cost comparison between Revival’s Hydrothermic Drying methods compared to traditional drying methods.

All analysis is based on 5 days hydrothermic drying on a 4 room, ground floor river flooded property, assuming traditional drying takes 6 weeks, using 4 Dehumidifiers and 10 airmovers.

	Hydrothermic Drying	Traditional Drying
Cost of drying	£7500	£5580.96
Stripping of plaster	£0.00	£800.00
Removal of floorboards	£0.00	£400.00
Additional Disposal Costs	£0.00	£150.00
Additional Alternative Accommodation	£0.00	£1000.00 minimum based on 5 weeks extra drying time, accommodation @ £200 per week
Additional cost of plastering	£0.00	£1000.00 estimate
Additional cost of flooring	£0.00	£1000.00
Cost of fuel	£850 (5 days @ £170 per day)	£1814.4 (figures from above @ 15p per unit)
<b>Total Costs</b>	<b>£8350.00</b>	<b>£10745.36</b>

**Total Savings: £2395.36**

These savings will be further enhanced if 2 properties are dried simultaneously, with the hydrothermic drying costs reducing to £4175 per property, giving a saving of £6750.36. There will also be further savings for alternative accommodation, as reinstatement time will be greatly reduced.

### How green is Hydrothermic drying?

Based on the above case study please see below a table highlighting the environmental qualities of hydrothermic drying.

Action	Saving
No need to remove plaster	Energy used by power tools to remove
	Reduces waste, less requirements for skips and transport of waste. Less to landfill
No need to re-plaster	Less mining for raw materials, reducing carbon foot print
	No need for new plaster, savings in energy consumption from manufacture and transport
	No need for plastering contractors to travel to site, eliminating energy consumption
Shorter drying time	Less energy consumption. Typical 4 rooms on ground floor will use 4 dehumidifiers and 10 airmovers over a period of approximately 6 weeks for a river flood, using 12096 units of electricity assuming machines are used 24 hours per day. The CO2 used to produce this is 9878400 grams (average for coal, oil and natural gas). Using hydrothermic drying, 500 litres of fuel in 5 days produces 1330000 grams of CO2. In Morpeth, Revival could dry 2 properties at the same time which means half the CO2 applied to each property