

15 UK factories to serve the merchant faster

For more information call your local manufacturing centre

**Blackburn** Contact: Michael Moore  
Unit 1, 565 Duttons Way,  
Shadsworth Business Park, Blackburn BB1 2PT  
Tel: 01254 693844 Fax: 01254 673615

**Braintree** Contact: Craig Stallard  
15 Finch Drive, Springwood Industrial Estate,  
Braintree, Essex CM7 2SF  
Tel: 01376 346005 Fax: 01376 346007

**Bristol** Contact: Barrie Hardcastle  
Unit 24, Southfield Trading Estate,  
Nailsea, Bristol BS48 1JJ  
Tel: 01275 810699 Fax: 01275 810698

**Dudley** Contact: John Parton  
Unit 22, Charlton Drive,  
Congreaves Trading Estate,  
Cradley Heath,  
West Midlands B64 7BJ  
Tel: 01384 636245 Fax: 01384 413700

**Hemel Hempstead** Contact: Paul Ranscome  
Unit 32E, Bourne End Industrial Estate,  
Upper Bourne End Lane,  
Hemel Hempstead HP1 2UJ  
Tel: 01442 862233 Fax: 01442 862234

**Huntingdon** Contact: Fraser Watt  
8 Phoenix Court, St Margaret's Way,  
Huntingdon PE29 6EB  
Tel: 01480 415980 Fax: 01480 413331

**Inverkeithing** Contact: Stuart Watt  
8 Belleknowes Industrial Estate,  
Inverkeithing, Fife KY11 1HZ  
Tel: 01383 414133 Fax: 01383 413123

**Liverpool** Contact: Craig Dixon  
8 Gibraltar Row, King Edward Industrial Estate,  
Off Bath Street, Liverpool L3 7HJ  
Tel: 0151 227 1574 Fax: 0151 236 0898

**Maidstone** Contact: Mark Tipping  
Unit 14, Quarry Wood Industrial Estate,  
Lake Road, Aylesford, Kent ME20 7TQ  
Tel: 01622 714770 Fax: 01622 882286

**Newport** Contact: Dougie Watts  
Unit 12 Wern Industrial Estate, Rogerstone,  
Newport NP10 9FQ  
Tel: 01633 896299 Fax: 01633 896300

**Nottingham** Contact: Marc Causer  
Unit 5, Bestwood Road, Brookhill Industrial Estate,  
Pinxton, Nottingham NG16 6NT  
Tel: 01773 580684 Fax: 01773 581129

**Paignton** Contact: Terry Cooper-Haime  
Unit 29, Torbay Business Park,  
Woodview Road, Paignton, Devon TQ4 7HP  
Tel: 01803 557470 Fax: 01803 559213

**Reading** Contact: Depot Manager  
Unit 4, Suttons Business Park, Reading  
Berkshire RG6 1AZ  
Tel: 01189 669990 Fax: 01189 669696

**Southampton** Contact: Rob Gunning  
Unit C1, Pegham Industrial Estate,  
Lavys Lane, Fareham, Hampshire PO15 6SD  
Tel: 01329 846601 Fax: 01329 845881

**Washington** Contact: Jim Houghton  
Unit 28, Sedling Road, Wear Estate,  
Washington, Tyne and Wear NE38 9BZ  
Tel: 0191 416 4477 Fax: 0191 417 0463

Due to a programme of continuous improvement Gledhill Building Products reserve the right to modify products without prior notice.

It is advisable to check the product technical detail by using the latest design and installation manuals available from our technical support team or on our website.

Spec 20. Issue 05. 11/09

### Thermally advanced

It is not widely appreciated that uncased foam insulated cylinders can lose up to 40% of their insulation value within weeks of manufacture and can emit dangerous smoke if involved in a fire. Torrent uses safe, non-toxic, non-combustible Rockwool for continuous high performance during the life of the unit. As with all Gledhill cylinders there is no release of ozone depleting substances or harmful emissions.

### Cold and hot water distribution design – all models

Torrent models are designed to be fed directly from the mains. They fulfil the requirements of Water Regulations and therefore do not require a check valve to be fitted to the supply pipe. The performance of the Torrent is directly related to the adequacy of the cold supply to the dwelling. This must be capable of providing for those services which could be required simultaneously and the maximum demand should be calculated. Torrent will operate at dynamic pressures as low as 1.5 bar (at the appliance) which must be available when local demand is at its maximum, but the preferred range is between 2 and 3.5 bar.

As a general guideline, although a 15mm external service may be sufficient for the smaller dwelling with one bathroom, a 22mm service is preferred (25mm MDPE) and should be the minimum for larger dwellings.

### Water treatment

The Domestic Heating Compliance Guide published in May 2006 requires a water treatment device to be fitted where the hardness is greater than 200ppm. Full details are given in the Design & Installation manual supplied with all Torrent Direct and Indirect units.

### Plastic pipework – all models

This appliance is suitable for use with hot water distribution plastic pipework as long as the material is recommended for the purpose by the manufacturer and is installed fully in accordance with their recommendations.

### Environmental

We are committed to minimising the environmental impact of our operations and work hard to comply with all relevant environmental legislation. We are pro-active in the recycling of old copper cylinders and can offer incentives to customers in order to help reduce the impact of waste on the environment. All our products have an Ozone Depletion Potential (ODP) of zero and a Global Warming Potential (GWP) of either one or zero.

# Torrent

## Open vented mains pressure thermal stores



The safer, simple way to provide mains pressure hot water to all your taps and showers - **with no unvented discharge requirement**



FM 2057  
Torrent is produced under an ISO 9001:2008 Quality System accepted by BSI



To protect our environment, we use copper a totally recyclable metal, which never becomes waste.



"Only the best is acceptable"

**Gledhill Building Products Limited**

Sycamore Estate,  
Squires Gate,  
Blackpool FY4 3RL

Tel: 01253 474550  
Fax: 01253 474551



**Gledhill**  
BUILDING PRODUCTS  
FOR THE MERCHANT TRADE



**Gledhill**  
BUILDING PRODUCTS  
FOR THE MERCHANT TRADE

# Torrent *A mains pressure hot water supply, incorporating a thermal store*



## A total hot water package

Torrent provides mains pressure hot water and is suitable for gas, oil, electricity or installations using renewable energies such as solar. It is safe, open vented, highly insulated and efficient. Torrent is a hot water thermal store that does not require expensive safety valves and is designed to upgrade existing traditional hot water systems.

## Mains pressure hot water

Torrent thermal stores provide:

- Mains pressure hot water giving 'power shower' performance
- Up to 25 litres per minute filling a standard bath in 3-4 minutes
- A dry roof space eliminating the risk of freezing pipes/tanks in winter
- Increased system efficiency, reducing running costs.

## Low cost installation/maintenance

Easy to install Torrent can be fitted to existing systems, including the existing boiler and controls, where appropriate. Unlike unvented cylinders, Torrent does not require expensive safety controls or the need to plumb temperature and pressure relief pipework to outside. External expansion vessels are not required and wiring is the same as

any traditional Y, S or W plan system. Torrent thermal stores do not require any annual maintenance. This complies with HWA spec for thermal stores.

## Long life

The thermal store is manufactured from copper sheet to BSEN 1653:1998. The computer designed heat exchangers are produced from finned tube and incorporate a patented expansion chamber which is sealed for life. The units are tested hydraulically and pneumatically, both during and after manufacture.

## The safety of a traditional system

BS6700: 1997 states that with unvented cylinders, the "maintenance and periodic easing of temperature relief valves is particularly important". This is a landlord's responsibility in tenanted properties and annual checks must be carried out by CITB trained persons or installers, having G3 approval. As Torrent is vented and therefore inherently safe, it is not subject to Building Control Regulations – thus simplifying system maintenance enormously for the landlords or homeowners.

## Torrent Indirect for use with gas, lpg or oil boilers and renewable energy

Torrent Indirect is a mains pressure vented hot water thermal store suitable for open vented and sealed heating systems. The Indirect unit can be fitted with a conventional 'S' plan, 'Y' plan or a control system of your choice and can be made suitable for either left or right fitting. It is also suitable for twin pump systems. Torrent is a Low Carbon Buildings Accredited Product and the five Torrent Renewable Energy models bring the advantage of harnessing the chosen energy source to supplement both hot water and heating requirements.

- Header tank can be sited remotely
- Insulated in high performance Rockwool
- All copper construction

Model	Store capacity (nominal) Litres	Hot water flow rate Litres/min	Dimensions (mm) of thermal store over insulation (inc. F&E tank) Height x Diameter	Minimum cupboard size if F&E tank is sited on top of unit Width x Depth x Height
T130	135	18	1545 x 520	700 x 600 x 1880
T170	176	18	1865 x 520	700 x 600 x 2100
T210	216	25	1835 x 570	700 x 600 x 2200
Suggested dwelling type: 2/3 bedroom house with one bathroom and separate en-suite shower room.				
Suggested dwelling type: 2/4 bedroom house with one bathroom and one or two separate en-suite shower rooms.				
Suggested dwelling type: 3/4 bedroom house with one bathroom and up to 3 separate en-suite shower rooms or 2 bathrooms and 2 separate en-suite shower rooms.				
All Models: Maximum working pressure, Primary thermal store = 6m, Primary heating coil = 3.0 bar Standard Components: Control Thermostat, DHW mixing valve.				

## Torrent for Renewable Energies – A Low Carbon Buildings Accredited Product

Model	Store capacity (nominal) Litres	Dedicated solar volume Litres	Hot water flow rate Litres/min	Dimensions (mm) of thermal store over insulation (inc F&E tank) Height x Diameter	Minimum cupboard size if F&E tank is sited on top of unit Width x Depth x Height	Typical boiler size for property based on 30 min recovery
T170 RE	176	65	18	1880 x 520	700 x 600 x 2150	20kW
T200 RE	206	76	18	2135 x 520	700 x 600 x 2400	20kW
T280 RE	286	95	25	2265 x 570	700 x 600 x 2500	25kW
T350 RE	381	125	25	2265 x 680	700 x 700 x 2500	30kW
T450 RE	482	153	35	2265 x 680	700 x 700 x 2500	40kW
Suggested dwelling type: 1 bathroom & 1 or 2 en suite shower rooms.						
Suggested dwelling type: 1 bathroom & 2 en suite shower rooms OR 2 bathrooms.						
Suggested dwelling type: 1 bathroom & up to 3 en suite shower rooms OR 2 bathrooms.						
Suggested dwelling type: 3 bathrooms & 2 en suite shower rooms.						
Suggested dwelling type: 5 bathrooms.						

## Torrent Direct – for providing hot water heated by electricity

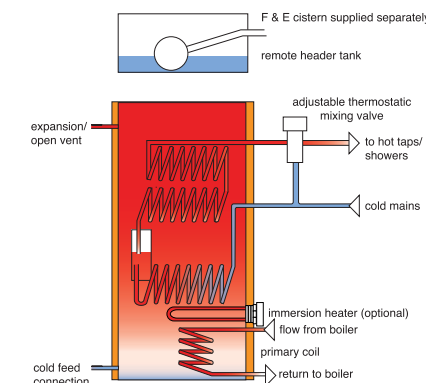
Torrent Direct is an electrically heated, mains pressure hot water thermal store, which makes the most of off-peak tariffs. It is a combination unit which incorporates a feed and expansion tank, and eliminates the problems associated with a cold water cistern in the roof space. It is supplied complete with two low watts density immersion heaters for extra quiet operation. 'Draw-off' for baths and 'flow' for power showering operate from this one compact unit which means there are more siting options, maximising building design flexibility.

Model	Store capacity (nominal) Litres	Hot water flow rate Litres/min	Dimensions (mm) of thermal store over insulation Height x Diameter	Minimum cupboard size Width x Depth x Height
T144 DE	160	15	1650 x 550	700 x 600 x 1900
T210 DE	230	15	1670 x 595	750 x 600 x 2120
Suggested Dwelling Type: 1 - 2 bedrooms, 1 bathroom.				
Suggested Dwelling Type: 2 - 3 bedrooms, 1 bathroom/1 shower.				
All Models: Off peak immersion heater: 3kW; 230V; 50Hz (Type 2) On peak immersion heater: 3kW; 230V; 50Hz (Type 2) Mains pressure: Working: 1.5 - 3.5 bar (A pressure reducing valve will be required if the incoming mains water pressure exceeds 3.5 bar within any 24 hour cycle)				

## How it works

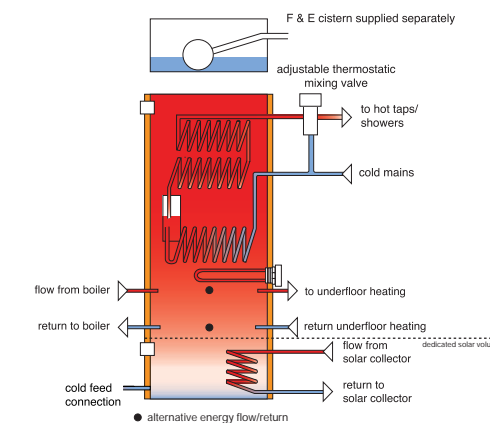
### Torrent Indirect

The Torrent thermal storage system is supplied with primary water from the boiler which heats the store via a primary coil. Secondary water flows directly from the cold mains into a secondary coil where it is heated by the store before being delivered to the taps.



### Torrent For Renewable Energies

Utilises the 'Gledhill SunSpeed' coil to make the most efficient use of heat provided from a solar heat source. Ask for a copy of our Torrent 'RE' Solar leaflet.



### Torrent Direct

Torrent Direct works in the same manner as the indirect version with the exception that the primary water in the store is heated by off-peak electricity via an immersion heater.

