

*the Lite fantastic*



UNVENTED MAINS PRESSURE  
WATER STORAGE IN DUPLEX  
STAINLESS STEEL  
WITH A 25 YEAR GUARANTEE



**Gledhill**

BUILDING PRODUCTS  
FOR THE MERCHANT TRADE

A top-down view of a woman with blonde hair tied up, relaxing in a white bathtub. The tub is filled with thick white bubbles. Several lit candles are placed around the tub, and a starfish is visible on the right side. The background is a light-colored tiled wall.

# Introducing Gledhill Stainless Lite

the new addition to a  
growing and flourishing family

# A complete package of products and services nationwide from a family with more than 60 years experience



The Gledhill name is synonymous with a family of water heating and storage products that lead the field in terms of innovation and quality. We are respected for our world-leading range of primary stores, but we have also produced unvented cylinders from the very beginning. Stainless Lite is an unvented mains pressure store in Duplex Stainless Steel that establishes new criteria for quality, performance and life.

Providing powerful, mains-pressure performance, it incorporates high flow rate controls, ideal for multi bathroom homes, where baths fill very quickly, and flexible sitting options.

There are Indirect and Direct patterns for gas/oil and electricity with 14 models in all, in sizes from 90 litres to 300 litres in each pattern with an additional eight options for solar energy.

## Material

Gledhill uses the best material for each application. Copper is used for our range of vented cylinders and our award winning primary stores. We used copper, manganese bronze, and stainless steel for back boilers for many years. We offer both aluminium and stainless steel heat exchangers for boilers, and we made our first stainless steel storage vessels in 1968.

## Duplex stainless

The Stainless Lite uses the very latest high specification Duplex to resist all forms of corrosion including crevice and stress whilst its high mechanical strength gives it the strength for long life. It is particularly light and easy to handle on site.

## Manufacture

The very latest automated welding procedures along with full post weld treatments guarantee welds that are as strong as the parent metal. Stainless Lite is pressure tested in the factory to a full 12 bar which is four times the normal working pressure.

## More hot water

Stainless Lite uses a high heat transfer corrugated tube heat exchanger to give a 20% faster recovery than plain tube. It is also lighter and stronger than plain tube making the vessel the lightest and easiest to handle on site.

## Controlled stratification

The unique Gledhill diffuser reduces turbulence when cold water enters the store by baffling the flow.

## Minimal heat loss

Tests show that the 50mm of polyurethane foam injected into the case and covering both domes achieves astonishingly low levels of heat loss.

## Guarantee

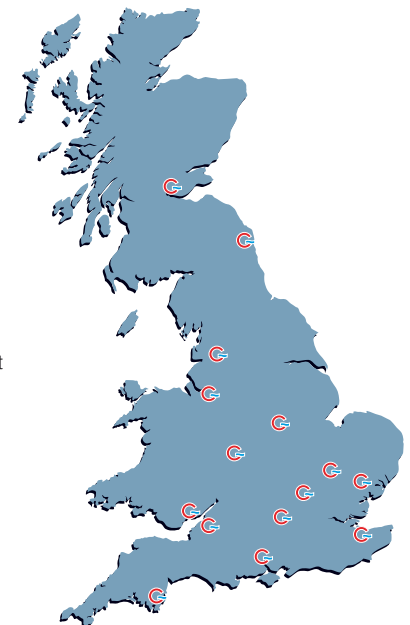
The 25 year guarantee underlines the usual Gledhill confidence in its own products. We regularly have copper cylinders returned to us that we made more than 40 years ago – why should anyone expect less from stainless steel?

## Service

Buying a good reputable product is critical – but it must be available when needed. Gledhill has FIFTEEN strategically located manufacturing units (three more are planned in 2008) so that delivery can be made to a merchant anywhere within hours. TRY US.

## Field support

Gledhill has more than 20 service support staff – count on us when necessary.

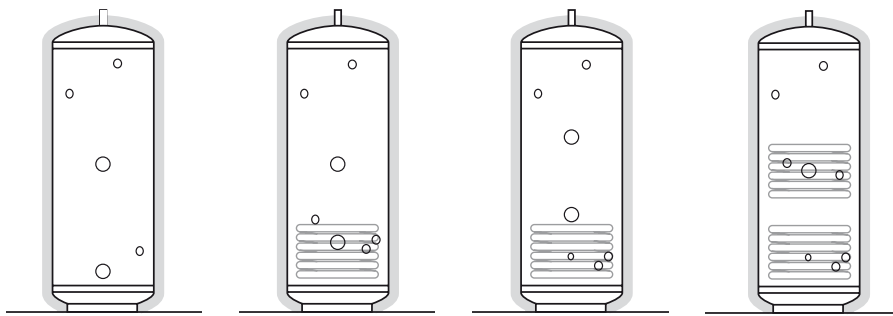


## The Gledhill Stainless Lite is supplied complete with all the quality fittings you need:

- Immersion heater(s)
- Inlet control set
- 2 part zone valve (indirect)
- Benchmark Log Book
- Wiring centre (Indirect)
- 15mm/22mm tundish
- Dual thermostat (indirect)
- Expansion vessel
- Full installation /maintenance instructions
- Wall mounting bracket
- Temperature and pressure relief valve
- Expansion vessel hose

See  
the Lite  
a model to  
suit any  
home





**DIRECT**

Supplied with two immersion heaters for off-peak and on-peak use, these cylinders are the ultimate lightweight, easy to install answer for electric hot water options.

**INDIRECT**

The indirect range has high efficiency corrugated tube coils to give much faster re-heat times than can be achieved with plain tube coils. All tappings are within a 90° segment to make installation easier.

**SOLAR DIRECT**

An electrically heated cylinder with a high performance solar coil. It is capable of meeting the requirements of ADLI, provided that it is matched to the panels and the hot water requirement correctly.

**SOLAR TWIN COIL**

Cylinders heated from conventional boiler (oil or gas) are provided with a second high performance coil for solar use.



Maximum efficiency for conventional and renewable energies

The suggested Direct model sizes are based on a typical days hot water use assuming an Economy 7 tariff is provided. A reduction of one model size can normally be made with an Economy 10 tariff.

When using the Direct models for high specification developments an increase of one model size should be considered.

**SELECTION GUIDE**

Max Hot Water demand	Max Number of Bed Spaces (Bedrooms)	Indirect Litres	Direct Litres
1 shower room	Bedsit (0)	90	120
1 bathroom	2 (2)	120	150
1 bathroom	4 (3)	120	180
1 bathroom / separate shower room	6 (4)	150	210
1 bathrooms / 2 separate shower rooms or 2 bathrooms	7 (5)	180	210
2 bathrooms / separate shower room	7 (5)	210	250
2 bathrooms / 2 separate shower rooms	7 (5)	250	300
3 bathrooms / 2 separate shower rooms	9 (6)	300	-

**GLEDHILL STAINLESS LITE**

		Direct							Indirect						
		D90	D120	D150	D180	D210	D250	D300	IND90	IND120	IND150	IND180	IND210	IND250	IND300
Model															
Weight (empty)	kg	13	18	22	24	28	32	37	19	22	26	28	33	38	44
Weight (full)	kg	103	138	172	204	238	282	337	109	142	176	208	243	278	344
Capacity	Litres	90	120	150	180	210	250	300	90	120	150	180	210	250	300
Pressure regulator	Bar	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Expansion vessel size	Litres	12	12	18	18	24	24	40	12	12	18	18	24	24	40
Height	mm	732	920	1107	1295	1483	1733	2020	732	920	1107	1295	1483	1783	2020
Diameter	mm	550	550	550	550	550	550	550	550	550	550	550	550	550	550
kW rating of primary coil	kW	n/a	n/a	n/a	n/a	n/a	n/a	n/a	16.5	18	18.5	19	20.5	21.5	25
Recovery time after 70% draw off	min	58	90	121	157	192	224	263	16	19	19	21	26	30	32
Standing losses	kWhr/24hrs	0.80	1.00	1.20	1.40	1.60	1.75	1.93	0.80	1.00	1.20	1.40	1.60	1.75	1.93

**GLEDHILL STAINLESS LITE SOL**

		Direct				Indirect			
		SOL180d	SOL210d	SOL250d	SOL300d	SOL180i	SOL210i	SOL250i	SOL300i
Model									
Weight (empty)	kg	26	30	34	39	30	35	40	46
Weight (full)	kg	206	240	284	339	210	245	290	346
Capacity	Litres	180	210	250	300	180	210	250	300
Pressure regulator	Bar	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Expansion vessel size	Litres	18	24	24	40	18	24	24	40
Height	mm	1295	1483	1733	2020	1295	1483	1733	2020
Diameter	mm	550	550	550	550	550	550	550	550
kW rating of primary coil	kW	n/a	n/a	n/a	n/a	18	18.5	19	20.5
kW rating of solar coil	kW	19	19	19	19	19	19	19	19
Electrical/boiler recovery time after 70% draw off	min	90	115	139	187	16	16	19	20
Standing losses	kWhr/24hrs	1.40	1.60	1.75	1.93	1.40	1.60	1.75	1.93
Dedicated solar volume	Litres	60	70	84	100	60	70	84	100

When using a solar appliance it is important to check the dedicated solar volume with the property specification/ floor area and if necessary increase the model size to ensure compliance with the Building Regulations.

Designers should allow a footprint of 650mm x 650mm by the height of the unit allowing for plumbing of the hot draw off.

# It's better by tube

the corrugated tube increases the heating surface and creates turbulence which gives a 20% better heat exchange than plain tube.

The extra thickness of foam provides a cylinder with extremely low standing losses.



## INSTALLATION

### water supply

The unit will operate down to minimum Byelaw supply requirements but best performances are achieved above 25 L/M and 1.5 bar dynamic pressure.

### flow rates

Up to 50 L/M if the supply is adequate.

### expansion chamber

A potable water expansion chamber is supplied that is adequate for the storage vessel. If exceptional secondary circuits are fitted please contact your local manufacturing centre.

### secondary circulation

A tapping is fitted as standard on larger vessels – please see Technical Specification Chart.

### boiler compatibility

Stainless Lite vessels can be fitted with oil, gas or electric boilers if a control thermostat and thermal cut-out is fitted. The system can be sealed primary or vented. Solid fuel boilers must not be used for any unvented cylinder.

### fixing

The vessels are designed for vertical fixing. Installers must be competent (approved) to comply with Building Regulations G3 (England & Wales). Technical Standards P3 (Scotland). Building Regulations to P5 (Northern Ireland) and all local regulations.

### plumbing

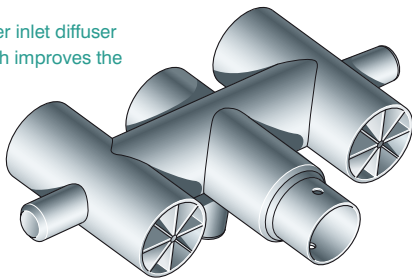
Cold feed / hot water draw-off / primary flow and return are provided with 22mm compression fittings with nuts and olives.

### cold water inlet equipment

The cold water control valve is factory set to give 2.25 bar. It is designed for high flow rates and is complete with line strainer, non return valve and expansion valve set to 4.5 bar.

A new design of cold water inlet diffuser has been developed which improves the hot water performance.

The end result is that the hot water output is equal to the capacity. A 180 litre vessel will produce 180 litres of hot water!



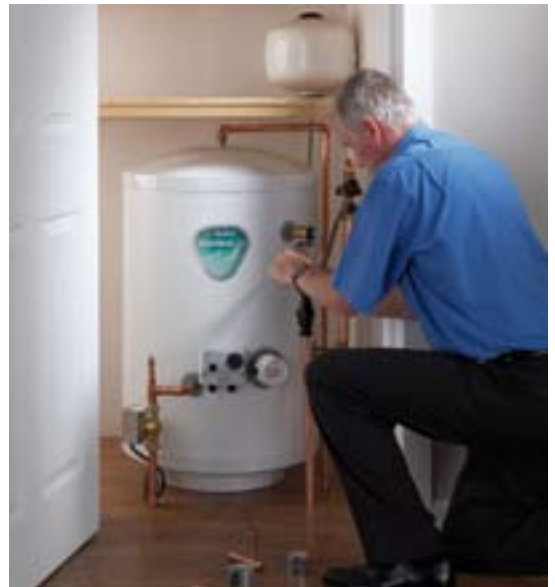
## ELECTRICAL

### indirect

The electrical installation must conform to the latest IEE Wiring Regulations. The controls should be wired to the boiler, programmer etc in accordance with the chosen control scheme.

### direct

The immersion heater(s) must be permanently connected to the supply through a double pole linked isolating switch with a minimum breaking capacity of 13A.



## SPECIFICATION

### storage vessel

Made from Duplex grade stainless steel by the latest automatic welding processes. Post weld processes ensure the stainless corrosion resistance is maintained.

### primary coil

The tube is corrugated for greater strength and higher heat transfer. This construction allows 20% more heat transfer than plain tube and guarantees more usable hot water.

### thermal insulation

CFC/HCFC free fire retardant polyurethane foam with an ozone depletion potential of zero (ODP ZERO) and a global warming potential (GWP) of 1.

### casing

Plastic coated corrosion proofed steel.

### capacities

90, 120, 150, 180, 210, 250, 300 litres.

### pressure testing

To 12 bar.

## SAFETY FEATURES

### indirect

High limit thermal cut-out operates at 85°C wired in series with two port motorised valve.

### direct

Manually re-settable cut out on heating element. All models have a temperature and pressure relief valve factory set at 6 bar and 95°C.

## APPROVALS

All Stainless Lite cylinders are manufactured in accordance with BS EN 12897 the specification for unvented water storage vessels.

The cylinders have been tested by KIWA a member of the European Organisation for Technical Approvals (EOTA) and found to comply with Building Regulations G3 and Water Regulation.

In performance, it complies with the requirements BS6700 and meets the NHBC criteria for domestic properties. Gledhill also operates a quality management system audited and accepted by the BSI in accordance with BS EN ISO 9001 : 2000.



**Gledhill**  
BUILDING PRODUCTS

SUPPLIED THROUGH MERCHANTS ONLY

## 15 UK manufacturing locations to serve the merchant faster

### GUARANTEE

THE GLEDHILL Stainless Lite carries a transferable 25 year guarantee against faulty materials or manufacture provided that:

- It has been installed in line with all the relevant regulations and codes of practice in force at the time
- The guidance in the Installation Manual has been followed and the unit has not been modified, misused or subjected to neglect.
- It has only been used for potable water and has not been damaged by frost or scale
- It has been serviced annually.

The parts fitted to the storage vessel are guaranteed for two years from the date of purchase. Please see our Conditions of Sale for the full warranty terms.



The code of practice for the installation, commissioning and servicing of central heating systems



FM 2057

Gledhill cylinders are produced under an ISO 9001:2000 Quality System accepted by BSI



**Blackburn** Contact: Michael Moore  
Unit 1, 565 Duttons Way,  
Shadsworth Business Park,  
Blackburn BP1 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,  
Corngreaves Trading Estate,  
Cradley Heath,  
West Midlands B46 7BJ  
Tel: 01384 636245 Fax: 01384 413700

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

**Huntingdon** Contact: Chris O'Connor  
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: Tony Beswick  
8 Gibraltar Row, King Edward Industrial Estate,  
Off Bath Street, Liverpool L3 7HJ  
Tel: 0151 227 1574 Fax: 0151 236 0898

**Maidstone** Contact: Mark Woodward  
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

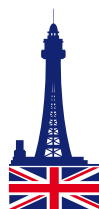
**Nottingham** Contact: Marc Causer  
Unit 5, Bestwood Road, Brookhill Industrial Estate,  
Pinxton, Nottingham NG16 6NT  
Tel: 01773 580684 Fax: 01773 581129

**Reading** Contact: Vince Verrier  
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

**Paignton** Contact: Mark Nelis  
Units 29, Torbay Business Park, Woodview Road  
Paignton, Devon TQ4 7HP  
Tel: 01803 557470 Fax: 01803 559213

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



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IN BLACKPOOL

Gledhill Building Products Limited

Sycamore Estate, Squires Gate, Blackpool FY4 3RL  
Tel: (01253) 474550 Fax: (01253) 474551

Information on the full range of Gledhill products can be found on the internet at [www.gledhill.net](http://www.gledhill.net)

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



"Only the best is acceptable"