LOGSTOR *SolarPipe*

Pre-insulated pipe system for solar power installations

distributing energy efficiency

LOGSTOR

Getting the most out of solar panels

Transporting heated water to where it's needed without wasting any energy – that's what the LOGSTOR SolarPipe pre-insulated pipe system is all about. Installation is quick and easy, and you only need a few different components to deal with the entire range of pipe sizes and fitting specifications.

Getting solar heat to where it's needed

Effective solar panels are only part of commercial solar power installations.

The results they provide depend heavily on how efficiently the heated water is transported to the places where it is required. Such places can often be a heat exchanger or absorption equipment elsewhere in the building.

The LOGSTOR SolarPipe system is the perfect solution for this job. It makes it possible to transfer heat over considerable distances with hardly any energy loss. And the system remains just as effective at retaining heat throughout its entire service life.

The unique pre-insulated pipes are also easy and fast to install in and on any building, with only a few components needed to deal with the entire range of pipe sizes and fitting specifications.

The pre-insulated advantage

LOGSTOR is the world's largest manufacturer of pre-insulated pipe systems.

The heart of all these systems is the H_2O, CFC-free polyurethane cellular foam that completely encloses the service pipe.

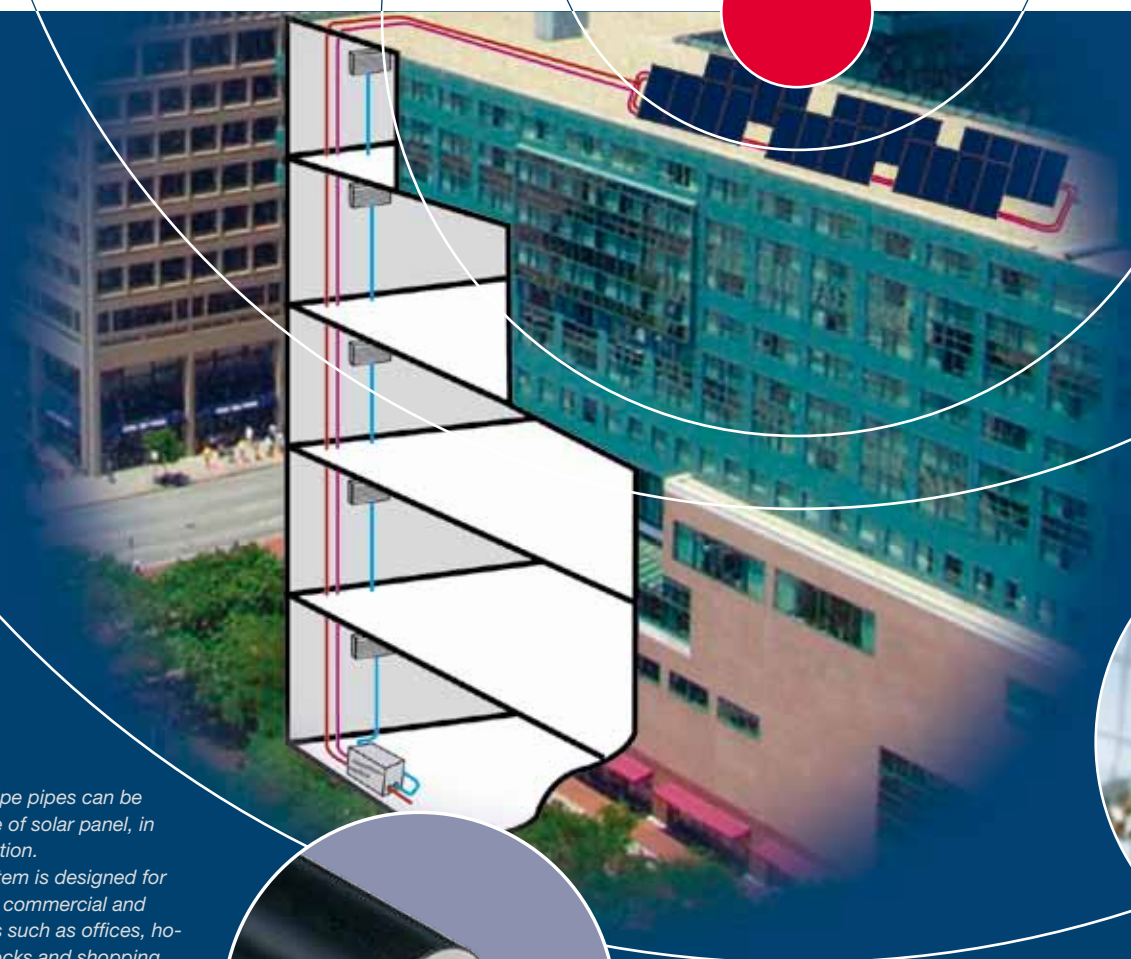
To ensure complete consistency, top quality and a long service life, the insulation is applied as a fully integrated part of the manufacturing process – under perfectly controlled factory conditions.

This insulation is applied as a fully integrated part of the manufacturing process, under perfectly controlled factory conditions. This ensures complete consistency and top quality that results in a considerably extended service life.

LOGSTOR SolarPipes gives heat to new terminal in Barcelona International Airport

The ongoing expansion of Barcelona International Airport, also known as El Prat, includes a new terminal building which will be equipped with solar energy.

LOGSTOR solar pipes including a wide range of fittings and joints were chosen for the project as they keep the loss of energy to an absolute minimum when transporting hot water to the consumption place.



Where it goes

LOGSTOR SolarPipe pipes can be used with any type of solar panel, in any kind of installation.

The SolarPipe system is designed for easy installation in commercial and industrial buildings such as offices, hotels, apartment blocks and shopping centres. It is equally suitable for pipe runs inside and outside a building.

The durability of these unique pre-insulated pipes means that they can be installed in relatively inaccessible and hidden places because the insulation does not need to be renewed.

How it works

LOGSTOR SolarPipe pipes are available in 5-metre lengths, with a 22–54 mm copper service pipe inside an outer casing of 90 or 110 mm in diameter. The service pipe sections are joined using only a pressure coupling and one special tool.

The short casing sections used to insulate around these joints consist of open half-shells and a shrinkable collar. The collar is heated and shrunk into place around the shells and the casing sections in order to complete the outer casing and make it weatherproof and waterproof.

Connect

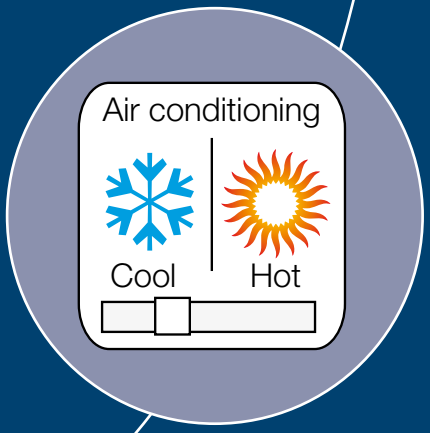
The ends of the copper service pipe are joined with a pressure coupling that is crimped in place with an electrical tool.

Insulate

Two standard-sized insulated half-shells are placed around the jointed service pipe, butting up against the outer casing of each length.

Shrink

A collar is shrunk into place over the two half-shells that protect the coupling, using a blowtorch or hot air blower, sealing the system.



What it's used for

The solar panels heat the water in the pipes to temperatures as high as 150°C. This heat energy can then be used for a wide range of heating and cooling purposes. Using LOGSTOR SolarPipe pipes on both forward and return pipe runs makes it possible to use heat exchangers to exploit temperature differences to the full. And to significantly reduce the energy consumption and costs that stem from the many services and utilities now commonly used on commercial and industrial premises.

Finished joint ready to withstand the effects of weather and normal wear and tear.

Retains the heat

The exceptional thermal efficiency of the LOGSTOR SolarPipe pipe system enables the owners and users of commercial premises to make the most of the solar energy provided by solar panels.

The system makes sure the energy acquired in the form of heat can be moved to where it is needed, with virtually no loss en route, regardless of the length or complexity of the pipe system, or where it is installed.

Stays the distance

The service pipe, the insulation around it and the outer casing are manufactured as one integrated unit, under carefully monitored factory conditions. The highly resilient PE-HD polyethylene outer casing is designed to cope with the effects of ultra-violet light, weather and climate and installation surroundings, as well as normal wear and tear.

This drastically reduces through-life costs for solar panel piping, to the benefit of building owners and operators.

Easy to install

The LOGSTOR SolarPipe system is designed to be easy and fast to install using only a minimum of manpower – who need no special skills or tools.

This makes it easy to plan and cost an installation project, avoiding hidden surprises. It also makes it easy for installers to deal with on-site adjustments in planned pipe runs, without needing special components.

It paves the way for installers to use new, cheaper and faster solutions for pipe routing, and providing architects and consulting engineers with greater freedom of manoeuvre for design and configuration.

Minimum of inventory

Using the LOGSTOR SolarPipe system, it only takes a limited number of components to deal with the full spectrum of installation specifications.

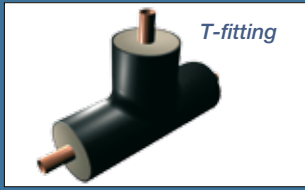
This enables wholesalers and stockists to meet installers' requirements quickly and easily, while carrying only a minimum of inventory and reducing logistics costs.

Components

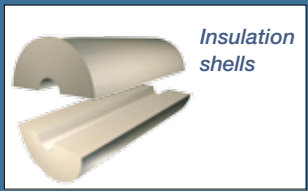

Pipes


Elbow 45°


Elbow 90°


T-fitting


Collar


Insulation shells


Wrap set


End-Cap

General data

A. Service pipe

Material	hard copper, Cu-DHP CW024A acc. to EN 12499

B. Insulation

Material	closed-cell polyurethane
Lambda value at +50°C	0.0285 W/mK
Operating temperature	140°C/30 years continuously

C. Casing pipe

Material	UV-resistant PE-HD polyethylene

Pipes - length 5 m

Ø22/90 mm, Ø28/90, Ø35/90 mm, Ø42/110 mm and Ø54/110 mm

Elbows angle 90° and 45°

diameters for both types Ø22/90 mm, Ø28/90, Ø35/90 mm, Ø42/110 mm, Ø54/110 mm

T-fitting	Diameters 22/90 x 22/90 x 22/90 28/90 x 28/90 X28/90 35/90 x 35/90 x 35/90 42/110 x 42/110 x 42/110 54/110 x 54/110 x 54/110
Joint shrinkable collar	Ø90 mm and Ø110 mm - width 225 mm
Insulation half-shells	Ø90mm and Ø110 mm

These are used along with the shrinkable collars

Wrap set open shrinkable collar

Ø90mm and Ø110 mm - width 225 mm

End-cap DHEC	for Ø90 mm and Ø110 mm

Quality-managed production and installation

LOGSTOR proactively addresses quality and environmental concerns right from component manufacture to finished installation. As part of these efforts, all LOGSTOR production companies are certified in accordance with ISO 9001 and ISO 14001.

We also provide a wide range of technical services for contractors, consultant engineers and supervisors, as well as detailed, practical instructions for installers to use on site.

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