

# Flexigas

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TESLA UK

## The fast and truly versatile system for **gas installations**



bsi.  
Stainless Steel Corrugated  
Semi-rigid Tubing  
KITEMARK™

KM 598726  
EN 15266



# Always innovating

Flexigas™, designed for domestic and commercial gas installations is the intelligent choice for plumbers who are looking for an efficient, lightweight and flexible alternative to rigid copper or steel. Through constant innovation, Flexigas™ continues to develop faster, easier and safer solutions for gas installations. Flexigas™ hold a number a patented and patent pending features, including Flexigas DS™, FG Link™ and FG Bond™.

Flexigas™ is approved by British Standards under the KiteMark certification scheme and is manufactured in accordance with EN 15266.



KM 598726  
EN 15266



Gas.BE  
EN 15266

The most **flexible** CSST  
system in the UK



Made from a sheet of stainless steel formed into a series of corrugations, Flexigas™ tubing bends easily by hand while still maintaining the integrity and strength of a steel tube

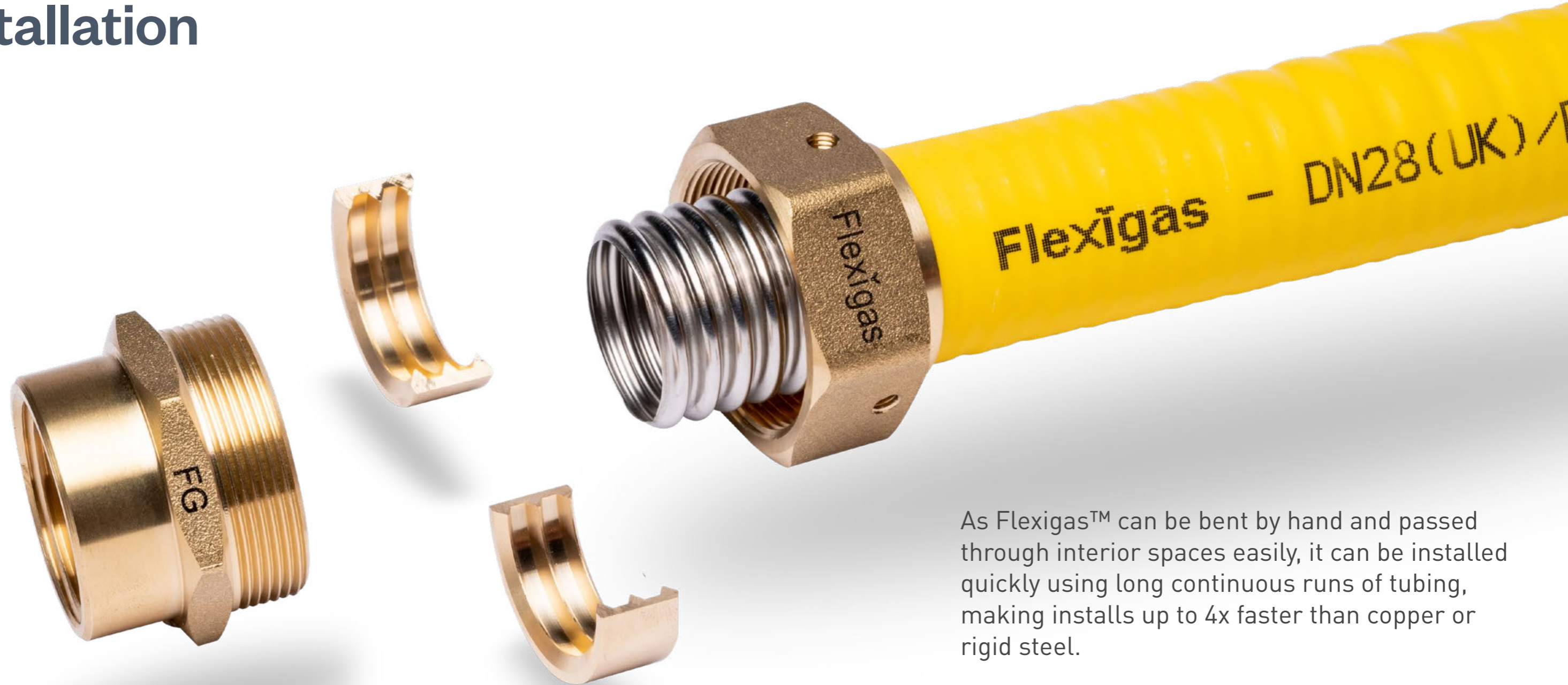
## Flexible Steel Tubing.

The corrugations in the tubing allow for flexibility without sacrificing on strength, compressing together on the inside edge and slightly expanding on the outside edge to easily create any angle required.

Flexible Steel Tubing has been around for some time. It was originally developed in Japan in the 1980's as it is a far safer option in earthquake prone environments allowing the gas installation some flexibility during a seismic event. Due to numerous additional safety features and the fact that installation times can be significantly reduced, corrugated stainless steel tubing systems have since become widespread throughout North America, and more recently in Europe.



# Easier, faster and safer: offering a solution for every installation



As Flexigas™ can be bent by hand and passed through interior spaces easily, it can be installed quickly using long continuous runs of tubing, making installs up to 4x faster than copper or rigid steel.

The patented Flexigas™ fittings ensure a secure seal in a matter of seconds without the need for any specialist tools. No soldering, sealants or heavy crimping tools are required.

In addition, as Flexigas™ requires far fewer fittings than traditional methods there are far fewer locations where a gas leak might occur.



**Every installation  
scenario covered.**

## **Introducing Flexigas DS™**

- ✓ Solid floors
- ✓ Solid walls and structural elements of a building
- ✓ Earth or ground / soil
- ✓ Screed
- ✓ Unventilated voids
- ✓ Unventilated risers - small annulus means suitable for direct clipping

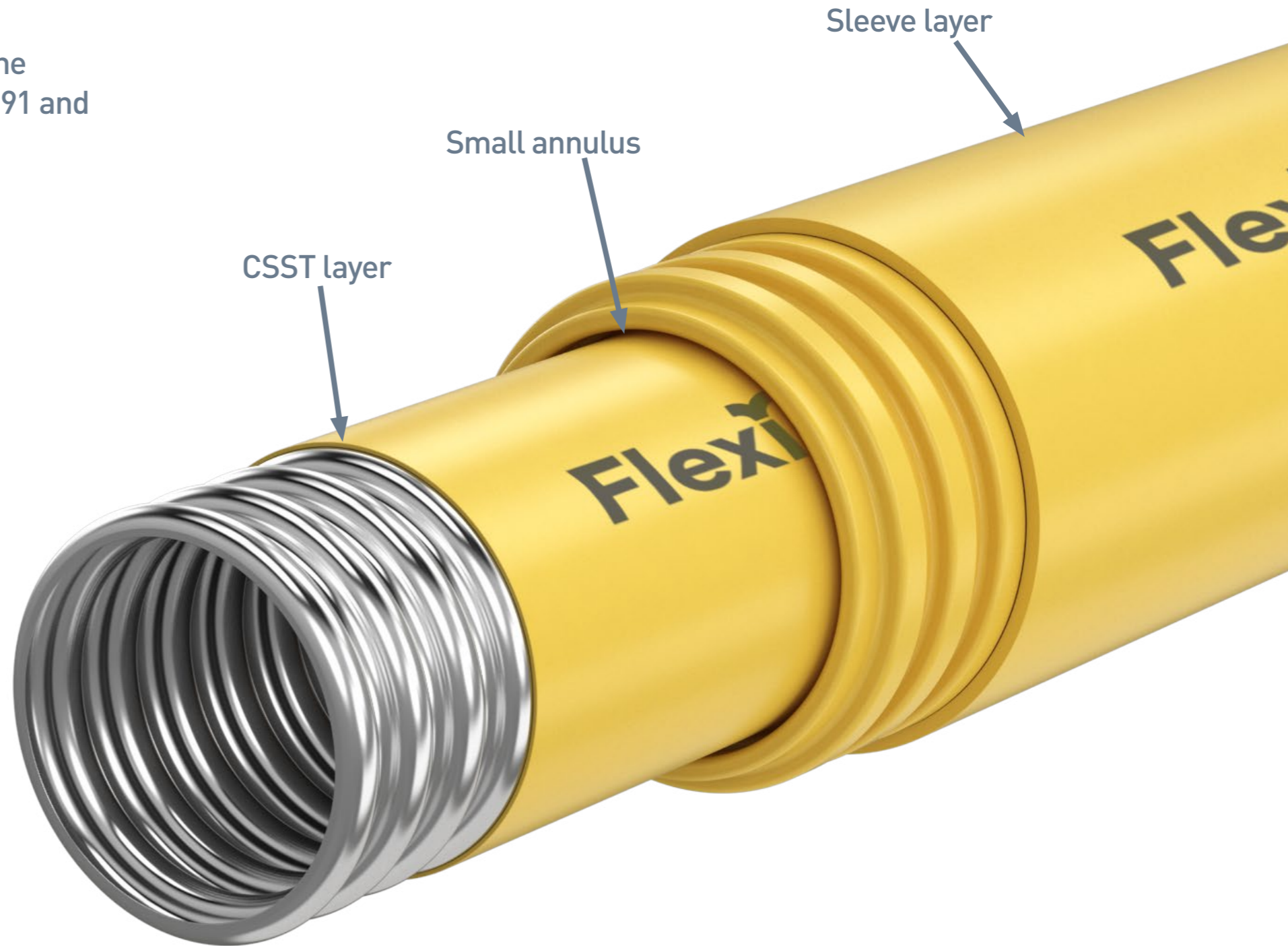
**Flexigas DS™ is a patent pending, double layered flexible gas piping system consisting of a:**

- 3 1st inner CSST layer (Corrugated Stainless Steel Tubing) plus a yellow polyethylene cover.
- 3 2nd outer sleeve layer, including V0 fire rated corrugated sleeving, with an exterior polyethylene cover.

The outer sleeve layer is designed specifically to meet the definition of a sleeve according to UK regulations (BS 6891 and IGEN/UP/2, 3 & 7), and is in slidable configuration with the inner CSST layer.

Flexigas DSn consists of a very small annulus between the layers, keeping the overall diameter to a minimum, while still allowing the inner CSST to be inserted and withdrawn if necessary.

Flexigas DSn can be used to pass through 100% of all installation scenarios, straight out of the box, without adding additional sleeving on site.





# Flexigas DS™ FAQ

## What is the definition of a sleeve in UK regulations?

In BS 6891 (Section 3.38) - a protective pipe forming an annulus embedded in the structure through which pipework can be inserted and withdrawn.

In IGEM/UP/2 (Section 5.2.7) - a sleeve is defined as a case (normally tubular) inserted through a void or space in a building for the reception of a gas installation pipe and is impermeable to gas (known as pipe in pipe). Where pipework is required to be enclosed in a sleeve, for example when passing through a wall or unventilated void, the factory applied coating on copper pipe or pliable corrugated stainless-steel tube shall not be considered to fulfil such a purpose.

## Is it a requirement to use a pre-sleeved product like Flexigas DS?

No, standard Flexigas™ can of course be used for all gas installations. However depending on the installation, sleeving may be required to pass through certain sections of the installation, for example, through a solid wall or an unvented area.

## What is the advantage of using Flexigas DS™?

The advantage is that Flexigas DS™ can be used to pass through 100% of all installation scenarios, straight out of the box, without adding additional sleeving on site. Flexigas DS™ will save a lot of time on complicated installations, where sleeving is required.

## Where can Flexigas DS™ be used as a sleeve?

Everywhere (subject to BS 6891 and IGEM regulations), including:

- Solid floors
- Solid walls and structural elements of a building
- Earth or ground / soil
- Screed
- Unventilated voids
- Unventilated risers - small annulus means suitable for direct clipping



# An endless possibility of connections with FGLink™, the UK's largest range of CSST fittings

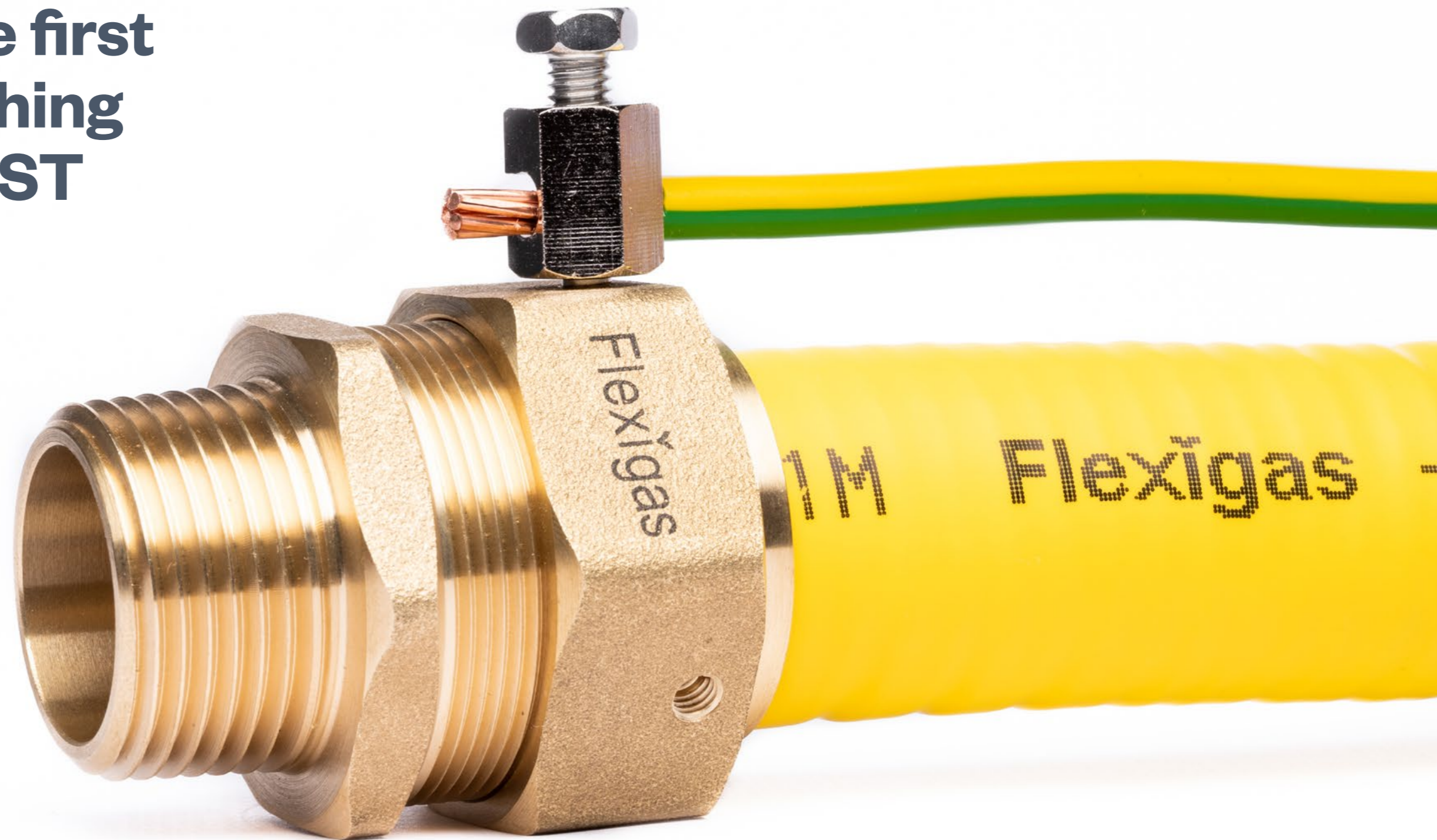


We have partnered with FlowFlex, the UK's largest brass fittings manufacturer, to develop over 130 fittings. Our huge range of fittings includes more than 55 copper connection fittings and 25+ DN40 fitting types.

The Flexigas™ and FGLink™ patented, and patent pending fittings makes Flexigas™ truly the most versatile gas system on the market. The one-step connection between copper and Flexigas™ leads to endless possibilities, giving you the best of both worlds.



# FG Bond™ - The first integrated earthing terminal for CSST



With gas plumbing, safety is a priority. All gas lines must be electrically bonded. Using our patent pending integrated bonding terminal, with Flexigas fittings, makes bonding simple and easy - eliminating the need for clamps or awkward and time-consuming bonding methods.

The FG Bond™ integrated bonding terminal is included in our Kitemark from BSI, and has been certified as meeting the relevant tests from BS 951:2009  
BS 951 and BS 7671 compliant tag included



KM 598726  
EN 15266  
BS 951:2009



## Secure metal-metal seal in seconds

Our patented sealing method creates a 100% metal-metal seal in seconds. As the fitting is tightened, the last corrugation of Flexigas™ tubing is deformed into a flared configuration against the metal seat of the fitting. The sizable and reversible collars are easy to handle and align the Flexigas™ tubing with the fitting during installation.

## Integrated tail for a neater finish

All Flexigas™ fittings include an integrated tail, providing a neater surface on which silicone tape can be applied.

All Flexigas™ boxes and spools include 1 x roll of free silicone tape.



## On-demand tubing

The Flexigas™ spool roller allows 300-400m coils to be easily unrolled on site, allowing for exact measurements and cuts with no wastage. Alternatively, Flexigas™ is also available in custom lengths for project work.

# Installation Guide

The Flexigas™ system has been designed with safety, simplicity and ease of use as the key components. The following seven steps will guide you how to attach a Flexigas™ fitting to tube, create a 100% metal seal and finish off the installation with everything being electrically bonded.

## Step 1 Cut

Using a wheel metal pipe cutter, ensure the cut is centred in the valley between corrugations and the cutter is only slightly tightened on each full revolution around the tube. Make sure the cut is clean and circular with no sharp edges.



## Step 2 Remove

With a utility knife, safely remove the flame retardant yellow cover so that the last four corrugations are exposed.



## Step 3 Slide

Slide the nut over the tubing and then place the two semi-circular collars around the tubing so that the ridges on the collars occupy the last three valleys of the tubing.



## Step 4 Tighten

Tighten the nut and fitting using two suitably sized wrenches. The seal is formed when the last corrugation deforms around the seat inside the fitting. Use sufficient torque.



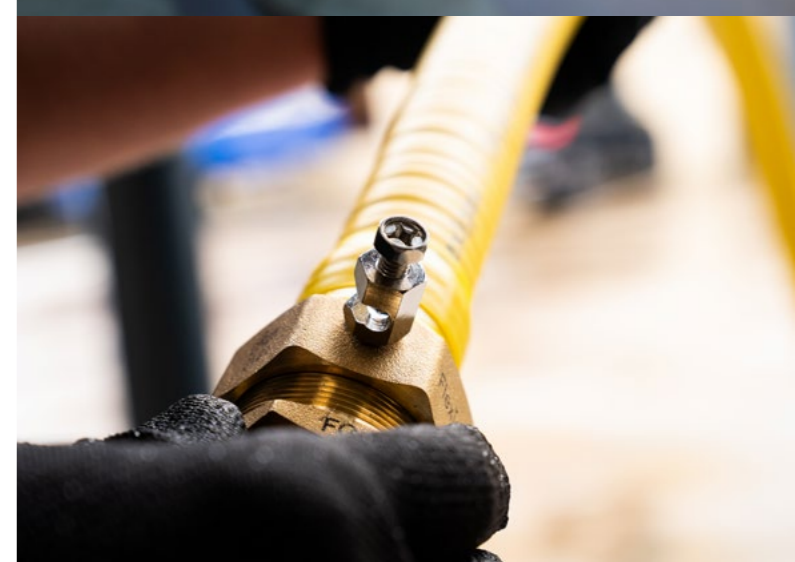
## Step 5 Wrap

After conducting a gas tightness test, wrap the small gap between the “tail” on the nut and tube using yellow silicone tape.



## Step 6 Attach

Place the warning notice between earthing terminal and the nut, and then attach the earthing terminal to the nut.



## Step 7 Bond

Strip earthing cable to reveal 1-2cm of copper wire. Screw down onto copper wire.



# What certifications does Flexigas™ have?

Flexigas™ is certified under the British Standards Kitemark certification scheme. The Kitemark is recognised throughout the UK and the world as a mark of a truly quality product. Not only have we tested Flexigas™ directly with British Standards but as part of the Kitemark scheme our products undergo regular on-going testing and manufacturing locations are audited regularly by British Standards.

Flexigas™ is manufactured in accordance with EN 15266. Additionally Flexigas™ has GAS.BE certification in Belgium.



KM 598726  
EN 15266



Gas.BE  
EN 15266

As part of the BSI Kitemark certification scheme Flexigas™ has undergone testing under fire conditions and has passed both EN1775 Annex A & B, and can therefore be used in protected areas.

# Key Features

British Standards KiteMark Certified.

UK's largest CSST fitting range with over 130 fittings, and 25+ DN40 fittings.

Wide range of unique and innovative patented solutions.

Easy integration with copper installations.

Designed for all domestic and commercial gas projects.

Integrated FG Bonded earthing terminal to make earth bonding easy.

Can be buried in screed or the ground without additional protection.

Unique tail on fitting means that only a small gap must be silicone taped resulting in a neater finish.

Free silicone tape included with every box and spool.

Metre marking (up to 400m) for easier installation.

No specialist tools required.

Specifically designed for UK market - uses 22mm and 28mm tube diameters.

Custom lengths for project work available. Tube lengths cut in the UK to order.



# Flexigas™ Products



## TUBING - Flexigas™ and Flexigas DS™

DN15-15m 15MM Flexible Gas Pipe 15m  
 DN15-25m 15MM Flexible Gas Pipe 25m  
 DN15-50m 15MM Flexible Gas Pipe 50m  
 DN15-75m 15MM Flexible Gas Pipe 75m

DN22-15m 22MM Flexible Gas Pipe 15m  
 DN22-25m 22MM Flexible Gas Pipe 25m  
 DN22-50m 22MM Flexible Gas Pipe 50m  
 DN22-75m 22MM Flexible Gas Pipe 75m  
 DN22-400m 22MM Flexible Gas Pipe 400m



DN28-15m 28MM Flexible Gas Pipe 15m  
 DN28-25m 28MM Flexible Gas Pipe 25m  
 DN28-50m 28MM Flexible Gas Pipe 50m  
 DN28-75m 28MM Flexible Gas Pipe 75m  
 DN28-90m 28MM Flexible Gas Pipe 90m  
 DN28-400m 28MM Flexible Gas Pipe 400m

DN32-15m 32MM Flexible Gas Pipe 15m  
 DN32-25m 32MM Flexible Gas Pipe 25m  
 DN32-50m 32MM Flexible Gas Pipe 50m  
 DN32-75m 32MM Flexible Gas Pipe 75m  
 DN32-90m 32MM Flexible Gas Pipe 90m  
 DN32-350m 32MM Flexible Gas Pipe 350m



DN40-50m 40MM Flexible Gas Pipe 50m  
 DN40-75m 40MM Flexible Gas Pipe 75m  
 DN40-200m 40MM Flexible Gas Pipe 300m

DN50-50m 50MM Flexible Gas Pipe 50m  
 DN50-200m 50MM Flexible Gas Pipe 300m

## ACCESSORIES

SPL-01 Spool Stand 50m/75m  
 SPL-02 Spool roller system for 300-400m coils  
 TCR-01 Tubing Cutter  
 ST-01 Silicone Tape 2m  
 ST-02 Silicone Tape 11m  
 EE01 Sleeving for Flexigas Tubing (DN22, 28)  
 EE02 Sleeving for Flexigas Tubing (DN32, 40)



## FITTINGS

### MALE UNION



SM 15-12 15 Flexigas x 1/2" Male BSP  
 SM 15-34 15 Flexigas x 3/4" Male BSP  
 SM 22-34 22 Flexigas x 3/4" Male BSP  
 SM 22-10 22 Flexigas x 1" Male BSP  
 SM 28-10 28 Flexigas x 1" Male BSP  
 SM 28-114 28 Flexigas x 1.1/4" Male BSP  
 SM 32-114 32 Flexigas x 1.1/4" Male BSP  
 SM 40-112 40 Flexigas x 1.1/2" Male BSP  
 SM 50-10 50 Flexigas x 2" Male BSP

### FEMALE UNION



SF 15-12 15 Flexigas x 1/2" Female BSP  
 SF 15-34 15 Flexigas x 3/4" Female BSP  
 SF 15-10 15 Flexigas x 1" Female BSP  
 SF 22-12 22 Flexigas x 1/2" Female BSP  
 SF 22-34 22 Flexigas x 3/4" Female BSP  
 SF 22-10 22 Flexigas x 1" Female BSP  
 SF 28-10 28 Flexigas x 1" Female BSP  
 SF 28-114 28 Flexigas x 1.1/4" Female BSP  
 SF 32-114 32 Flexigas x 1.1/4" Female BSP  
 SF 32-112 32 Flexigas x 1.1/2" Female BSP  
 SF 40-20 40 Flexigas x 2" Female BSP

### FLEXIGAS UNION



SU 15 15 Flexigas x 15 Flexigas  
 SU 22 22 Flexigas x 22 Flexigas  
 SU 28 28 Flexigas x 28 Flexigas  
 SU 32 32 Flexigas x 32 Flexigas  
 SU 40 40 Flexigas x 40 Flexigas  
 SU 50 50 Flexigas x 50 Flexigas



# Flexigas Products

## FLEXIGAS REDUCING UNIONS



SR 22-15	22 Flexigas x 15 Flexigas
SR 28-15	28 Flexigas x 15 Flexigas
SR 28-22	28 Flexigas x 22 Flexigas
SR 32-22	32 Flexigas x 22 Flexigas
SR 32-28	32 Flexigas x 28 Flexigas
SR 40-28	40 Flexigas x 28 Flexigas
SR 40-32	40 Flexigas x 32 Flexigas

## FLEXIGAS TO COPPER - STRAIGHT UNION



CC 15-15	15 Flexigas x Copper 15mm
CC 15-22	15 Flexigas x Copper 22mm
CC 15-28	15 Flexigas x Copper 28mm
CC 22-15	22 Flexigas x Copper 15mm
CC 22-22	22 Flexigas x Copper 22mm
CC 22-28	22 Flexigas x Copper 28mm
CC 28-22	28 Flexigas x Copper 22mm
CC 28-28	28 Flexigas x Copper 28mm
CC 28-35	28 Flexigas x Copper 35mm
CC 32-28	32 Flexigas x Copper 28mm
CC 32-35	32 Flexigas x Copper 35mm
CC 32-42	32 Flexigas x Copper 42mm
CC 40-35	40 Flexigas x Copper 35mm
CC 40-42	40 Flexigas x Copper 42mm
CC 40-54	40 Flexigas x Copper 54mm

## FLEXIGAS ELBOW



EE 15	15 Flexigas x 15 Flexigas
EE 22	22 Flexigas x 22 Flexigas
EE 28	28 Flexigas x 28 Flexigas
EE 32	32 Flexigas x 32 Flexigas
EE 40	40 Flexigas x 40 Flexigas

## MALE ELBOW



EM 15-12	15 Flexigas x 1/2" Male BSP
EM 22-34	22 Flexigas x 3/4" Male BSP
EM 22-10	22 Flexigas x 1" Male BSP

## FLEXIGAS TO COPPER - ELBOW



ECC 15-15	15 Flexigas x Copper 15mm
ECC 15-22	15 Flexigas x Copper 22mm
ECC 15-28	15 Flexigas x Copper 28mm
ECC 22-15	22 Flexigas x Copper 15mm
ECC 22-22	22 Flexigas x Copper 22mm
ECC 22-28	22 Flexigas x Copper 28mm
ECC 28-22	28 Flexigas x Copper 22mm
ECC 28-28	28 Flexigas x Copper 28mm
ECC 28-35	28 Flexigas x Copper 35mm
ECC 32-28	32 Flexigas x Copper 28mm
ECC 32-35	32 Flexigas x Copper 35mm
ECC 32-42	32 Flexigas x Copper 42mm
ECC 40-35	40 Flexigas x Copper 35mm
ECC 40-42	40 Flexigas x Copper 42mm
ECC 40-54	40 Flexigas x Copper 54mm

## FEMALE ELBOW



EF 15-12	15 Flexigas x 1/2" Female BSP
EF 15-34	15 Flexigas x 3/4" Female BSP
EF 22-34	22 Flexigas x 3/4" Female BSP
EF 22-10	22 Flexigas x 1" Female BSP
EF 28-114	28 Flexigas x 1.1/4" Female BSP
EF 32-112	32 Flexigas x 1.1/2" Female BSP
EF 40-20	40 Flexigas x 2" Female BSP

## WINGED FEMALE ELBOW



EFW 15-12	15 Flexigas x 1/2" Female BSP
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## EQUAL TEES



TT 15	15 Flexigas x 15 Flexigas x 15 Flexigas
TT 22	22 Flexigas x 22 Flexigas x 22 Flexigas
TT 28	28 Flexigas x 28 Flexigas x 28 Flexigas
TT 32	32 Flexigas x 32 Flexigas x 32 Flexigas
TT 40	40 Flexigas x 40 Flexigas x 40 Flexigas

# Flexigas Products



## FEMALE ADAPTER TEE

TF 15-12	15 Flexigas (ends) x 1/2" Female BSP (middle branch)
TF 22-34	22 Flexigas (ends) x 3/4" Female BSP (middle branch)



## REDUCING TEE

TR 22-15-15	22 Flexigas x 15 Flexigas x 15 Flexigas (middle branch)
TR 22-22-15	22 Flexigas x 22 Flexigas x 15 Flexigas (middle branch)
TR 22-15-22	22 Flexigas x 15 Flexigas x 22 Flexigas (middle branch)
TR 28-28-22	28 Flexigas x 28 Flexigas x 22 Flexigas (middle branch)
TR 28-28-15	28 Flexigas x 28 Flexigas x 15 Flexigas (middle branch)
TR 32-32-28	32 Flexigas x 32 Flexigas x 28 Flexigas (middle branch)
TR 32-32-22	32 Flexigas x 32 Flexigas x 22 Flexigas (middle branch)
TR 40-40-32	40 Flexigas x 40 Flexigas x 32 Flexigas (middle branch)
TR 40-40-28	40 Flexigas x 40 Flexigas x 28 Flexigas (middle branch)



## FLEXIGAS TO COPPER - TEES

C15-15-15	Copper 15mm x 15 Flexigas x 15 Flexigas (middle)
C22-15-15	Copper 22mm x 15 Flexigas x 15 Flexigas (middle)
C22-22-22	Copper 22mm x 22 Flexigas x 22 Flexigas (middle)
C28-22-22	Copper 28mm x 22 Flexigas x 22 Flexigas (middle)
C28-28-28	Copper 28mm x 28 Flexigas x 28 Flexigas (middle)
C35-28-28	Copper 35mm x 28 Flexigas x 28 Flexigas (middle)
C35-32-32	Copper 35mm x 32 Flexigas x 32 Flexigas (middle)
C42-32-32	Copper 42mm x 32 Flexigas x 32 Flexigas (middle)
C42-40-40	Copper 42mm x 40 Flexigas x 40 Flexigas (middle)
C54-40-40	Copper 54mm x 40 Flexigas x 40 Flexigas (middle)



C15-C15-15	Copper 15mm x Copper 15mm x 15 Flexigas (middle)
C22-C15-15	Copper 22mm x Copper 15mm x 15 Flexigas (middle)
C22-C22-22	Copper 22mm x Copper 22mm x 22 Flexigas (middle)
C28-C22-22	Copper 28mm x Copper 22mm x 22 Flexigas (middle)
C28-C28-28	Copper 28mm x Copper 28mm x 22 Flexigas (middle)
C35-C28-28	Copper 35mm x Copper 28mm x 28 Flexigas (middle)
C35-C35-32	Copper 35mm x Copper 35mm x 32 Flexigas (middle)
C42-C35-32	Copper 42mm x Copper 35mm x 32 Flexigas (middle)
C42-C42-40	Copper 42mm x Copper 42mm x 40 Flexigas (middle)
C54-C42-40	Copper 54mm x Copper 42mm x 40 Flexigas (middle)
C54-C54-40	Copper 54mm x Copper 54mm x 40 Flexigas (middle)



C15-15-C15	Copper 15mm x 15 Flexigas x Copper 15mm (middle)
C22-15-C15	Copper 22mm x 15 Flexigas x Copper 15mm (middle)
C22-22-C22	Copper 22mm x 22 Flexigas x Copper 22mm (middle)
C28-22-C22	Copper 28mm x 22 Flexigas x Copper 28mm (middle)
C28-28-C28	Copper 28mm x 28 Flexigas x Copper 28mm (middle)
C35-28-C28	Copper 35mm x 28 Flexigas x Copper 28mm (middle)
C35-32-C35	Copper 35mm x 32 Flexigas x Copper 35mm (middle)
C42-32-C35	Copper 42mm x 32 Flexigas x Copper 42mm (middle)
C42-40-C42	Copper 42mm x 40 Flexigas x Copper 42mm (middle)
C54-40-C42	Copper 54mm x 40 Flexigas x Copper 42mm (middle)
C54-40-C54	Copper 54mm x 40 Flexigas x Copper 54mm (middle)



## FLOWFLEX ADAPTERS

A-15	Flexigas 15 to Flowflex 22mm
A-22	Flexigas 22 to Flowflex 28mm
A-28	Flexigas 28 to Flowflex 35mm
A-32	Flexigas 32 to Flowflex 42mm
A-40	Flexigas 40 to Flowflex 54mm

\*Adapter fittings can only be used by installers that have completed a Flexigas training course on how to assemble Adapter fittings.

\*\*Adapter fittings can only be combined with fittings included on the Flowflex/Flexigas compatibility spec sheet.



## FG BOND™

EB-01	Integrated earthing terminal
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Download the Flexigas™ sizing app



# Flexigas



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