



**ISO**  
CHEMIE

**Joint impermeability**  
in lightweight  
metal constructions



ISO<sup>M</sup>-METAL BUILDING SEALING  
SYSTEM

# Joint impermeability in lightweight metal construction

In order to improve the total energy balance of buildings the requirements for joint impermeability is continuously being increased.



## GEG

In the Building Energy Act (GEG), air-tightness was increased further for building envelopes. Buildings are to be constructed in such a way that both the building envelope (heat loss through transmission) and the joints in the envelope be permanently air tight in accordance with the state-of-the-art technology. They also must conform to the new minimum thermal insulation and thermal bridging standards, to reduce the yearly heating requirements as much as possible.

## IFBS-guideline

The German industrial association for lightweight metal constructions (IFBS) demands special sealing of building joints between metal construction elements in order to continue the sealing over the individual building elements and construction sections. Stipulated by the GEG (Building Energy Act) and other engineering rules, these guidelines stress that internal partitioning constructions are airtight as well as temperature stable and possess the necessary thermal, acoustic, moisture and fire protection.



## Research building „Sandwich-Demo-House“

The industry association for lightweight metal constructions (IFBS) has in cooperation with the Technical University, faculty of Civil Engineering, RWTH in Aachen, Germany, fabricated a research building with the goal to test and optimise metal building constructions as a whole.

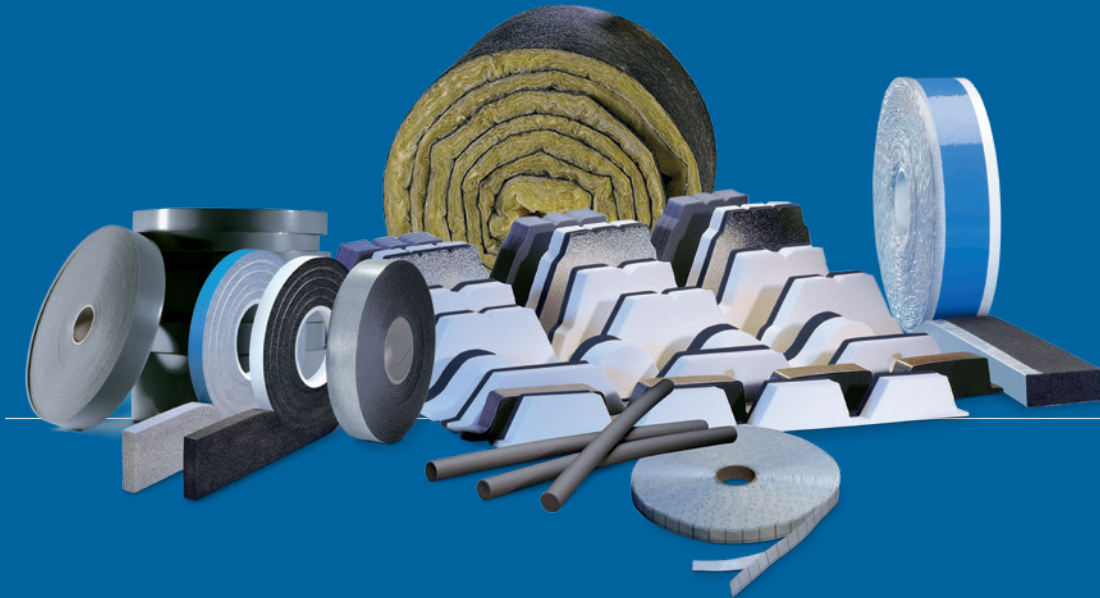
The demo house is constructed using the sandwich/composite technology to analyse airtightness and building structure characteristics. For example, new constructions should be tested for improved heat retention and noise reduction.

ISO-Chemie was able to, with the supply of sealing tapes and profile fillers, make an important contribution to the development of the research building and prove the ability of the system components.





# ISO<sup>M</sup>-METAL BUILDING SEALING SYSTEM



## ✓ Audited quality system

IFBS system audit and control by independent institutions verifies the perfect quality of our sealing system products.

## ✓ Coordinated Components

All products are coordinated in both application and function allowing them to be used in combination with each other.

## ✓ Complete solution

The components of the ISO<sup>M</sup>-METAL BUILDING SEALING SYSTEM solutions cover almost any joint situation in the lightweight steel constructions.

## ✓ Easy to install

Despite the weather ISO<sup>M</sup>-METAL BUILDING SEALING SYSTEM products can be easily and reliably installed.

## ✓ Guideline conformity

The system provides legal security. The products meet the GEG (Building Energy Act) and IFBS principle „joint impermeability in lightweight metal constructions“.

## ✓ Cost effectiveness

Time is money, therefore a straight forward and reliable installations is just as important as product durability.



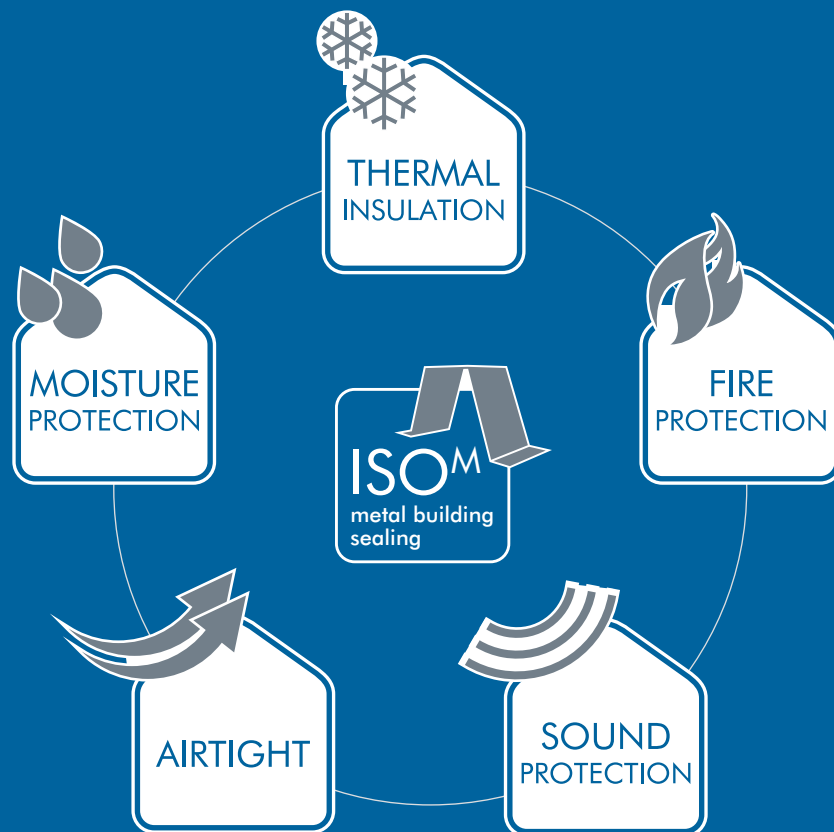
# Requirements for joint impermeability

## ISO<sup>M</sup>-METAL BUILDING SEALING SYSTEM:

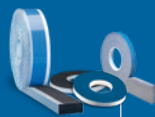
The complete protection for joints in lightweight steel construction.

Joints in lightweight steel constructions are exposed to numerous climatic and mechanical stress factors. These factors require a system solution for sealing the

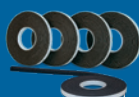
joints to withstand the various requirements such as thermal insulation, airtight, sound, moisture and fire protection as well as temperature change stability.



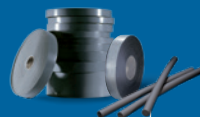
ISO-PROFIL



ISO-BLOCO



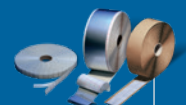
ISO-MEMBRA



ISO-ZELL



ISO-ACUSTIC



ISO-BUTYL

ISO-CONNECT



ISO-TOP



illustration purposes only



# System solution for joint impermeability

## ISO<sup>M</sup>-METAL BUILDING SEALING SYSTEM

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### Sealing with engineering technology

The ISO<sup>3</sup>-METAL BUILDING SEALING SYSTEM offers sealing solutions, conforming with the requirements of the GEG (Building Energy Act), DIN 4108, DIN 18542 and the IFBS (industrial association for lightweight metal constructions) guideline for almost any connection situation in light-gauge steel constructions.

### Sealing System

Consisting of several components, the sealing system, is specially adapted for an air tight performance in roof and wall constructions with steel cassette profiles and sandwich / composite elements.

### Sealing in accordance with IFBS-guideline

The system comprising of a wide selection of sealing tapes and profile fillers, fulfils the requirements and the specifications which are stipulated in the IFBS table "sealing tapes for application in lightweight metal constructions".

### Sealing System from one source

The ISO-Chemie sealing solution makes it possible for the first time to obtain a complete system from a single source. All system components are completely coordinated in function, application and compatibility with each other. This saves time, money and gives you reassurance.

### Audited quality system

Qualified system tests confirm the high product quality of ISO<sup>M</sup>-METAL BUILDING SEALING SYSTEM.



## ISO-BLOCO

sealing for moveable joints between structural elements in light-gauge steel constructions

## ISO-BUTYL

for a reliable and air tight bonding over building joints in metal constructions

## ISO-CONNECT

for external sealing of window- and door elements in metal constructions

## ISO-MEMBRA

for sealing profiled steel sandwich elements

## ISO-PROFIL

to close the voids created by trapezoid and corrugated panels

## ISO-TOP

for external sealing of moving joints, preparation of surfaces and filling of connection joints

## ISO-ZELL

for sealing and thermal separation on structural elements

## ISO-ACOUSTIC

for sound absorption in trapezoidal sheet metal, sandwich and composite constructions

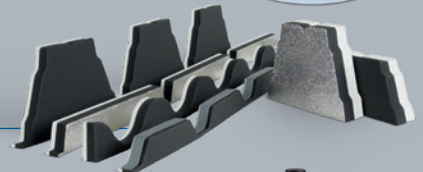
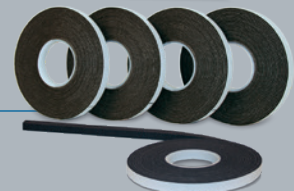
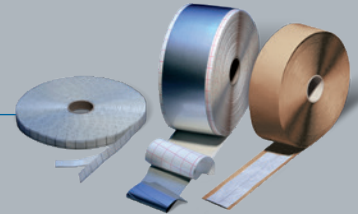
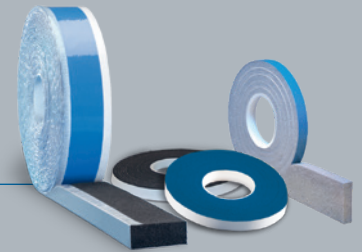
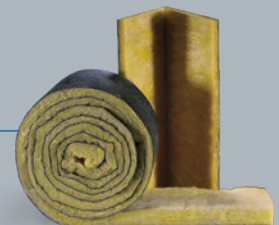
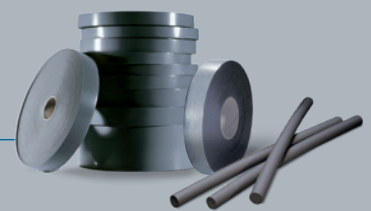


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