

Healthy Workplaces Good Practice Awards 2018-2019

CASE STUDY



Safe and economical procedure for handling asbestos-containing putty in the glazing trade



ORGANISATION/COMPANY

Federal Association of Glazier Trades
(*Bundesinnungsverband des Glaserhandwerks*)

COUNTRY

Germany

SECTOR

Construction, glazing

TASKS

Removal and renovation of glazing/handling of asbestos-containing glazing putty



Source: Federal Association of Glazier Trades.

Background

The Federal Association of Glazier Trades represents the interests of all glass specialists and professional groups in Germany, including glaziers, finishers and designers. It cooperates with its affiliated members — the Institute for Glazing Technology and Window Construction (*Institut für Verglasungstechnik und Fensterbau e. V*) and the Technical Competence

Centre (*Technische Kompetenzzentrum*) — in developing industry standards, compiling technical guidelines, and providing advice on technical issues and complying with laws and regulations. It also disseminates industry-relevant information through journal articles, events, trade fairs and seminars.

Asbestos is found at low levels in some glazing putty — used for several decades before 1993, when the

asbestos ban came into force. Typically, asbestos-containing putty was used with the single glazing of wooden windows, box windows, shed roofs, greenhouses and industrial buildings, as well as with the insulating glass of early aluminium-framed windows.

In 2016, the Federal Association of Glazier Trades consulted the German occupational safety and health authorities on how to deal with asbestos-containing putty. The authorities stipulated similar measures to those required for work involving much higher concentrations of asbestos in materials and corresponding exposure levels, including heavy-duty protective clothing and sealing off affected sites. These measures were considered disproportionate to the level of risk associated with removing asbestos-containing putty from glazing, and their implementation would require significant time, effort and money, making compliance difficult for many enterprises.

Aims

To develop practical measures for the removal of asbestos-containing putty that protect the health of glazing industry workers and customers, but that are proportionate, in terms of costs and resource use, to the risks involved.

What was done and how?

A three-part approach was taken:

- 1. Establishing a technical procedure for the removal of asbestos-containing putty:** a simple procedure was developed in collaboration with the Institute for Occupational Safety and Health of the German Social Accident Insurance (*Institut für Arbeitsschutz der deutschen gesetzlichen Unfallversicherung* (IFA)) and the Institution for statutory accident insurance and prevention Building Trade (*Berufsgenossenschaft Bau* (BG Bau)). The key principles are as follows:
 - only manual tools can be used, no machines
 - work must be performed outdoors
 - heat can be used only if the putty does not contain bitumen
 - a vacuum cleaner adapted to use with asbestos must be used
 - personnel must demonstrate certain qualifications.
- 2. Training:** glaziers must be suitably trained and certified in the abovementioned procedure before handling asbestos-containing putty. Training is supported by the Technical Competence Centre. Glaziers throughout Germany who successfully

complete the training are presented with certificates of competence.

- 3. Awareness-raising actions:** comprehensive information about the safe removal of asbestos-containing putty, and other dangerous materials, is widely disseminated by the Federal Association of Glazier Trades and the Technical Competence Centre in numerous publications.



Source: Federal Association of Glazier Trades.

What was achieved?

The procedure was assessed and approved by the Institute for Occupational Safety and Health of the German Social Accident Insurance, as its application was found to result in only low-level emissions of asbestos, well below the maximum exposure limit, thus effectively protecting workers from this hazardous substance. At the end of June 2018, the Federal Association of Glazier Trades received permission to train glaziers throughout Germany in the newly developed and approved method. Since then, more than 740 glaziers¹ have been trained and certified, enabling them to professionally renovate glazing with asbestos-containing putty in a safe and economical way. The procedure is now an official requirement for every glazier according to a regulation of the German Statutory Accident Insurance (DGUV — *Deutsche Gesetzliche Unfallversicherung*) — DGUV 201-012 'Removal of asbestos-containing putty in the glazing rebate by hewing and cutting with and without heating'.

In recognition of the successful implementation of this intervention, the Federal Association of Glazier Trades received a prize at the 12th German Hazardous Substances Protection Awards in the category 'Successful against asbestos'.

Success factors

A key factor in the successful development of this technique and the implementation of training and awareness-raising actions was the effective

¹ Revised October 2019

collaboration between the glazing industry's associations and institutions. In addition to the Federal Association of Glazier Trades, which initiated the project, the following organisations also played a prominent role:

- affiliated state guilds
- the Institution for statutory accident insurance and prevention for the Building Trade (BG Bau — *Berufsgenossenschaft Bau*)
- the Institute for Occupational Safety and Health of the DGUV (IFA — *Institut für Arbeitsschutz*)
- the Federal Institute for Occupational Safety and Health (BAuA — *Bundesanstalt für Arbeitsschutz und Arbeitsmedizin*).

The technique is inexpensive and simple to implement by following straightforward instructions, and — with appropriate training — anyone in the glazing industry can become qualified in safely handling asbestos-containing putty.



Source: Federal Association of Glazier Trades.

Transferability

The procedure to safely renovate glazing with asbestos-containing putty and the approach to training and information dissemination could be applied in other Member States. There is also potential for the procedure to be applied to products containing low levels of other dangerous substances.

Costs and benefits

The solution described — how to safely yet easily and economically remove asbestos-containing putty in glazing — is clear and easy to implement, and could have a huge impact on the sector by protecting glaziers and customers from asbestos without the need to implement costly, resource-intensive and time-consuming measures.

Raising awareness of the presence of dangerous substances such as asbestos in glazing products and how to handle them safely is beneficial to the health of workers in the industry and their customers.

Key features of good practice example

- The procedure developed and training offered have the potential to make an important contribution to ensuring the safety of workers handling asbestos in the glazing industry.
- The technique is simple to apply and cost effective, making it feasible to implement even for small businesses.
- The successful implementation of the intervention demonstrates the benefits of collaborative working between trade associations and occupational safety and health authorities and organisations.
- The intervention is sustainable and transferable to other Member States.

Further information

Further information can be found at <http://www.glaserhandwerk.de>

References and resources

Details of the procedure (German): https://www.dguv.de/medien/ifa/de/prg/asbest/bt_42.pdf

German Hazardous Substances Protection Awards: <https://www.baua.de/DE/Themen/Arbeitsgestaltung-im-Betrieb/Gefahrstoffe/Gefahrstoffschutzpreis/Gefahrstoffschutzpreis.html?pos=1>

'The solution could have a huge impact by protecting glaziers and customers from asbestos without the need to implement costly measures.'