

THE USE OF TREATED WOOD RAISES SERIOUS HEALTH AND ENVIRONMENTAL CONCERNS

In ventilated façade construction, the choice of substructure materials plays a major role in the long-term safety, durability, and sustainability of the entire façade system.

In countries such as the Netherlands and Belgium, treated timber is still frequently used as a load-bearing support structure behind façade cladding systems.

However, growing international awareness is raising important questions about the health and environmental impact of chemically treated wood.

At TWEHA®, we believe modern façade construction should not only focus on technical performance, but also on responsible material choices.

What Is Treated Wood?

Treated or impregnated wood is timber that has been chemically processed to improve resistance against:

- Moisture;
- Rot;
- Fungal attack;
- Insects;
- Weathering.

During the treatment process, chemical preservatives are pressed deep into the wood structure under pressure.

While this may improve durability, many of the chemicals traditionally used in treated wood are highly aggressive and potentially hazardous.

Hazardous Chemicals in Treated Timber

Several substances historically or currently used in wood preservation are associated with significant health and environmental concerns.

Examples include:

- Copper II oxide;
- Chromium trioxide (Chromium VI);
- Tebuconazole;
- Copper carbonate / copper hydroxide compounds.

Among these substances Chromium VI is internationally recognized as A Class 1 Carcinogen, meaning it is considered highly toxic and carcinogenic to humans.

Some other treatment chemicals are also classified internationally as potentially carcinogenic or environmentally hazardous.

Limited Attention During Use and Disposal

Although strict regulations often exist during the industrial production phase of treated wood, far less attention is typically given to risks during:

- Sawing;
- Cutting;
- Installation;
- Waste handling;
- Demolition;
- Disposal.

This is remarkable because European regulations already recognize that certain treated wood substances should not come into direct contact with human skin.

Yet on construction sites, exposure during processing often remains underestimated.

International Concerns About Treated Wood

In several countries outside the Benelux region, the use of treated timber in façade systems is already:

- Restricted;
- Discouraged;
- Or considered unacceptable.

The main concerns are:

- Human health risks;
- Toxicity;
- Corrosive properties;
- Environmental contamination;
- Long-term sustainability.

As sustainable construction becomes increasingly important, the continued use of chemically treated timber raises difficult questions regarding responsible building practices.

Burning Treated Wood Is Extremely Dangerous

One very important safety warning must always be emphasized **Never Burn Treated Wood!** When treated timber is treated, toxic substances may be released into the air through hazardous smoke and fumes.

This smoke can present serious health risks to:

- Workers;
- Occupants;
- The surrounding environment.

Treated wood should therefore always be disposed of through approved waste collection and disposal procedures.

For larger quantities, specialized disposal arrangements may be required according to local regulations.

Towards Safer and More Sustainable Façade Solutions

Modern ventilated façade systems increasingly focus on:

- Durability;
- Safety;
- Environmental responsibility;
- Long-term performance.

This also means critically evaluating the materials used within the supporting structure itself.

At TWEHA®, we believe the façade industry must continue to evolve toward safer, cleaner, and more sustainable construction solutions that reduce risks for:

- Installers;
- Building users;
- The environment;
- Future generations.

Because truly sustainable construction is not only about how long a building lasts — but also about the impact its materials have on people and the environment throughout their entire lifecycle.

TWEHA®, 2026