

Robusta

# SMART DEMOLITION

WITH TECHNICAL DEMOLITION CURTAINS



E-BOOK



# DEMOLITION WITHOUT DISRUPTION, CLAIMS OR DELAYS

Urban demolition projects are becoming increasingly complex. Working in dense city environments, with strict regulations, limited space and high expectations from local residents, presents significant challenges for project managers and contractors.

How do you combine safety, speed, sustainability and regulatory compliance in one practical execution plan?

# INDEX

In this e-book\*, you will discover how technical demolition curtains play a key role in delivering controlled, low-risk demolition projects.

We explore six key themes that determine the success of any inner-city demolition project.

Each theme is linked to real-world practice, relevant research and evolving regulations, giving you insight into the strategic value demolition curtains add to your projects.

You will also discover how **Robusta** goes beyond supplying products, acting as a partner in safe, efficient and future-proof demolition.

## 1. SITE SAFETY



## 2. ENVIRONMENT & SUSTAINABILITY



## 3. USE OF TECHNOLOGY



## 4. NUISANCE REDUCTION



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A photograph of a city street with modern buildings and a construction crane. The image is overlaid with a dark teal background and a quote in white text. The quote is: "THE CITY IS NOT A CONSTRUCTION SITE, BUT WE MAKE IT TEMPORARILY WORKABLE." The background shows a tall yellow construction crane between two modern buildings. The building on the left has a facade of vertical grey panels, and the building on the right has a facade of dark grey panels. The sky is a clear, pale blue.

**“THE CITY IS NOT A CONSTRUCTION SITE, BUT WE MAKE IT TEMPORARILY WORKABLE.”**

# 1. SITE SAFETY

Safety is not a side issue, but an absolute prerequisite for every demolition project. Especially in urban environments where traffic, pedestrians and vulnerable buildings are often located directly next to the worksite.

According to the *Dutch Safety Board* and the *Labour Inspectorate*, insufficient physical shielding and inadequate risk analysis are among the primary causes of incidents in construction and demolition projects. The timely deployment of demolition curtains is increasingly recognised as an effective preventive measure.

## **Demolition curtains provide:**

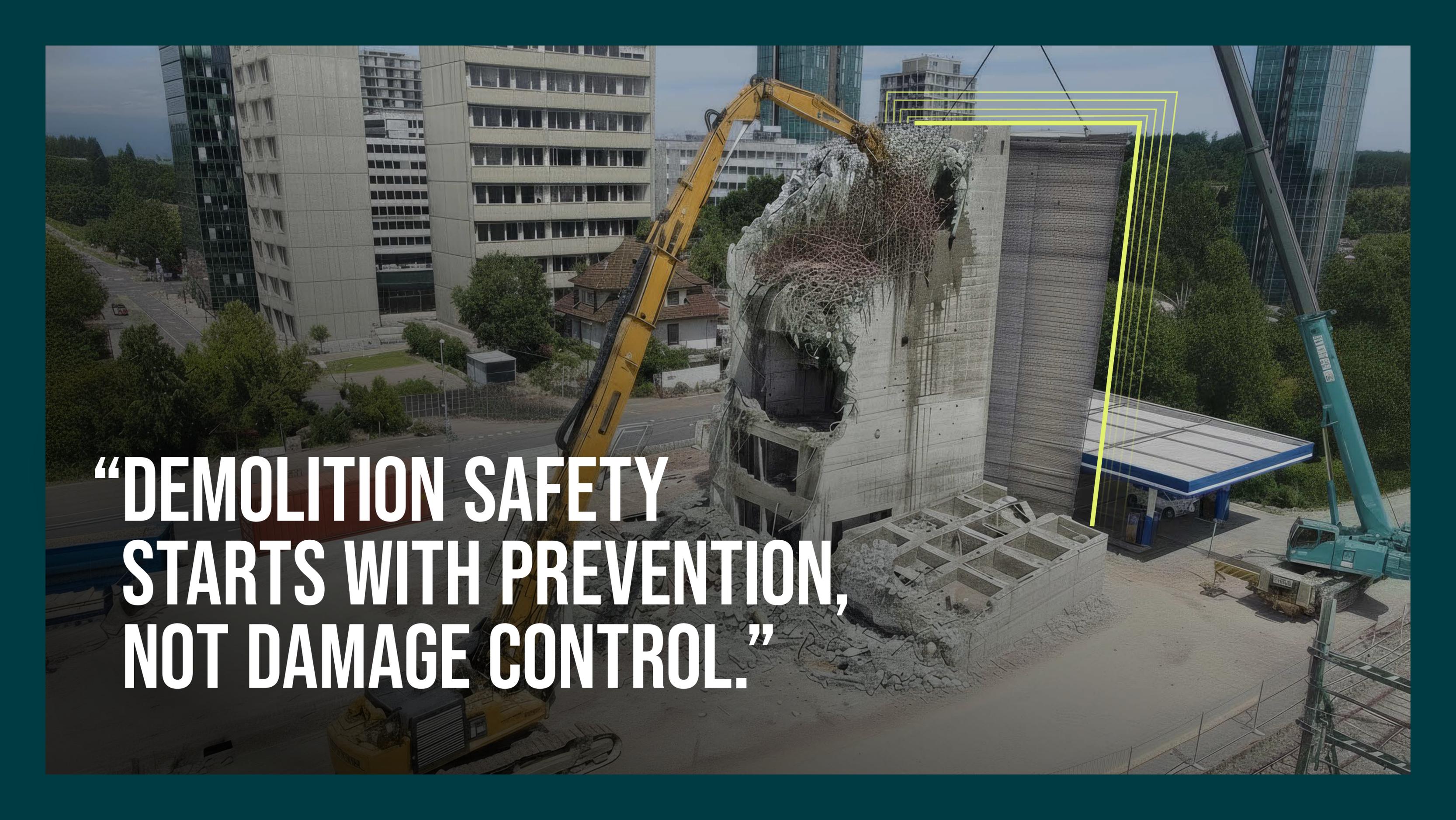
- ✓ Protection against falling debris and rubble
- ✓ Containment of dust and fine particles
- ✓ Noise reduction during breaking and cutting operations





They also support compliance with *health and safety legislation* and the Building Decree governing demolition activities. These regulations require employers to minimise risks to third parties, including residents, passers-by and visitors.

This means implementing measures to prevent falling debris, dust dispersion, excessive noise and unauthorised access. Preparing a Health & Safety Plan and a Risk Inventory & Evaluation is mandatory. Failure to comply may result in intervention by the Labour Inspectorate, including warnings, fines or a suspension of work.



**“DEMOLITION SAFETY  
STARTS WITH PREVENTION,  
NOT DAMAGE CONTROL.”**

# 2. ENVIRONMENT & SUSTAINABILITY

The construction sector is undergoing a transition towards a circular economy. By 2050, the Netherlands aims to be fully circular. *The Netherlands Enterprise Agency (RVO)* actively promotes material reuse, environmental impact reduction and CO<sub>2</sub> reduction.

## What does this mean for demolition?

In practice, it comes down to three core principles.

- **Selective demolition:** Rather than crushing an entire building indiscriminately, valuable materials are carefully removed and preserved for reuse, such as steel beams, natural stone and installations. These materials gain a second life, making demolition both more sustainable and often more cost-effective.





- **Fine dust control:** Fine dust poses a recognised risk to public health, particularly in densely populated areas. Demolition curtains contain dust at the source, contributing to a healthier work environment and reducing nuisance for surrounding communities.
- **Smart logistics:** By capturing debris immediately and removing it in separated streams, transport movements are reduced and CO<sub>2</sub> emissions are significantly lowered. This aligns with the national ambition for zero-emission construction sites by 2030.

The result? Smarter demolition with greater public support, less waste and higher residual value.

**Demolition curtains support this by:**

- ✓ Protecting reusable materials from damage
- ✓ Minimising the spread of hazardous substances (such as asbestos particles or heavy metals)
- ✓ Acting as physical boundaries for separated material flows

Read more about circular demolition via *Cirkelstad*.

# 3. USE OF TECHNOLOGY

## More than a steel curtain on a scaffold

Demolition curtains have evolved significantly in recent years. Modern systems are specifically designed to meet the high demands of inner-city demolition projects.

### Technical features include:

- ✓ Fire-retardant (in accordance with EN 13501-1)
- ✓ Modular design, adaptable to any building
- ✓ Integration with lifting systems or scaffold structures

These solutions form part of a broader trend known as **'Smart Demolition'**.

This approach combines technical tools, data-driven planning and modular systems to make demolition safer, more efficient and more predictable.





Examples include real-time wind load monitoring, digital project models for optimal placement of shielding, and the reuse of demolition components through digital material passports.

According to *Bouwend Nederland*, such innovations are no longer optional. They are essential to meet increasingly strict safety and sustainability requirements in urban construction projects.

Integrating demolition curtains into a smart demolition strategy provides control, clarity and peace of mind, both on site and at the decision-making table.

**Looking to apply smart technology in your demolition approach?**

Let us advise you on the possibilities. [Get in touch.](#)



**“TECHNOLOGY THAT MAKES  
YOUR WORK SAFER AND FASTER  
PAYS FOR ITSELF.”**

# 4. NUISANCE REDUCTION

Urban demolition projects operate under a magnifying glass. Residents, municipalities and interest groups are increasingly critical. According to the *Inspectorate for the Environment and Transport* (ILT), the number of complaints about demolition noise and dust increases every year.

Their report states:

*"The nuisance caused by construction and demolition activities remains a concern, particularly in densely built areas where residents are directly affected. Proactive measures are necessary to limit disturbance and avoid enforcement actions."*





This highlights the importance of preventive shielding and clear communication. The use of technical demolition curtains demonstrably contributes to reducing nuisance and maintaining public support.

**Demolition curtains help by:**

- ✔ Containing dust during breaking operations
- ✔ Reducing noise from hammers, saws and lifting movements
- ✔ Providing visual shielding (a key factor in public acceptance)

In this way, demolition curtains also act as a communication tool: they show that you take the surrounding environment seriously. Combine this with clear stakeholder communication, and you gain both trust and time.

An aerial photograph of a construction site. Four workers in high-visibility vests and hard hats are gathered on a large, flat concrete slab. One worker is kneeling and looking at a tablet, while others stand around him, some holding papers. The scene is set against a dark green background with yellow diagonal lines in the top left corner.

**“DELAYS ARE PREVENTED  
NOT JUST WITH CONCRETE,  
BUT WITH POLICY.”**

# 5. LOGISTICS & ORGANISATION

Time is money. Especially on sites where limited space, permit requirements and tight schedules intersect. Every hour of delay costs money, and every obstruction causes chain disruptions.

## Demolition curtains contribute to streamlined site organisation:

- **Flexible, phased deployment**

On projects where demolition is carried out floor by floor, curtains can be easily installed or relocated per segment. This allows the shielding to move with project progress without requiring a completely new system each time.

- **Reduced use of public space**

Because curtains can be attached directly to the building or integrated into scaffolding, less street-level space needs to be cordoned off. This saves costs and permit time while minimising disruption to traffic, deliveries and pedestrian flows.





- **Fast and easy installation and removal**

Modular systems and lightweight materials allow curtains to be installed without cranes or specialised equipment. This shortens setup time, avoids downtime and makes systems reusable within the same project or on future sites.

In short, these technical solutions do not only improve safety and sustainability, they also support smarter, more efficient construction logistics.

They increase project feasibility and, with it, the likelihood of success. This is professional risk management in practice.



**“THOSE WHO CONTROL LOGISTICS  
CONTROL THE ENTIRE PROJECT.”**

# 6. LEGISLATION & LIABILITY

Imagine this scenario: during the demolition of a former office building on a busy city street, a loose fragment hits a parked car, or worse, a passer-by. Beyond immediate damage or injury, liability of the contractor or client is instantly questioned.

This is not hypothetical. According to the Dutch Safety Board, multiple incidents in recent years have resulted in damage and legal disputes due to inadequate shielding on construction and demolition sites.

In urban demolition, legal safeguards are therefore critical, not only through insurance, but especially through preparation, execution and documentation of preventive measures.





## Demolition curtains help demonstrate proactive risk management:

- **Embedded in the Health & Safety Plan**

Explicitly including demolition curtains in the H&S Plan shows that third-party protection was considered already at the design stage. This prevents disputes later and facilitates communication with enforcement authorities.

- **Secured within the Risk Inventory & Evaluation (RI&E)**

Curtains can be recorded as control measures against falling debris, dust dispersion and noise exposure, demonstrating a structured and systematic approach to risk management.

- **Clear instructions and maintenance documentation**

A proper system comes with proper documentation. User manuals, inspection reports and installation guidelines prove that the system was correctly applied and maintained, crucial if legal scrutiny ever arises.

By not only deploying demolition curtains, but also embedding them legally and organisationally, you strengthen your position as a professional and diligent contractor. See also the *National Guideline for Construction and Demolition Safety 2024*.

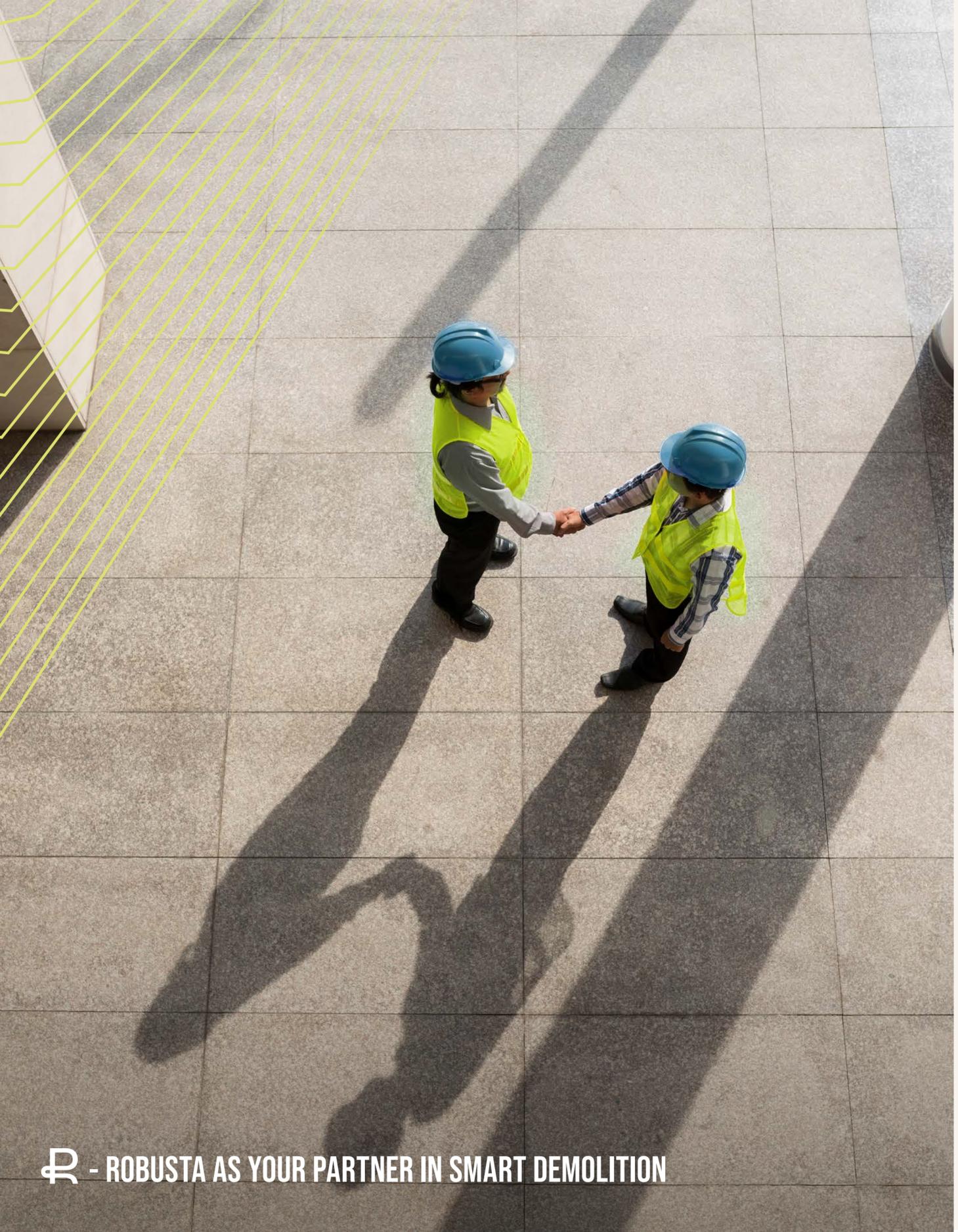
# ROBUSTA AS YOUR PARTNER IN SMART DEMOLITION

Robusta specialises in technical containment solutions and delivers more than products. We act as a guide within an increasingly complex construction environment. Whether it involves drafting a Health & Safety Plan, integrating demolition curtains into a circular demolition process, or reducing nuisance for surrounding communities, we actively contribute throughout the entire project lifecycle.

Our technical experts analyse your project location, working methods and environmental requirements and translate these into a containment solution that truly works.

We account for factors such as wind load, installation time, permit requirements and logistical chains – all topics addressed in this e-book.





Where others deliver fabric, we deliver insight, justification and peace of mind. Robusta supports you before and during execution with advice, guidance and on-site assistance.

Because we understand that your worksite is also a social environment. And in that context, thoughtful containment is not optional, it is essential.

**What makes Robusta unique:**

- ✓ Years of experience in complex demolition projects
- ✓ Fast delivery and on-site support
- ✓ Close collaboration with main contractors, site managers and safety coordinators

With Robusta, you don't buy a steel curtain; you invest in trust, experience and continuity. Because your project deserves a tailored solution.



**“ROBUSTA IS NOT A SUPPLIER, IT IS  
YOUR PARTNER IN DEMOLITION SAFETY.”**

# FROM RISK TO CONTROL

Urban demolition will never be simple, but it can be controlled. With technical demolition curtains from Robusta, risks become visible, manageable and solvable. You work safer, smarter and in line with today's and tomorrow's requirements.



**Curious about what's possible for your next project?** We're happy to think along with you. Complete the form for a no-obligation project scan or contact one of our advisors directly.

[Contact us](#)

# Robusta

Want to know more about smart demolition using technical demolition curtains?

[Contact us](#)

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Readers are responsible for complying with all applicable local laws and standards.*