

Technical Brief: Theft on Construction Sites - Why It Happens, Why Inside Jobs Are Hard to Stop, and What Actually Works

A practical guide for owners, developers, and builders on the national picture, the delivery-to-installation "exposure window," and the layered controls that reduce material and equipment theft, including theft by people who have legitimate access to the site

Executive summary

Every builder eventually learns the same lesson: a jobsite is one of the easiest places in America to steal from. It is open, it is often empty for fourteen hours a day, it holds high-value material that is not yet installed or serialized, and dozens of people from different companies have a legitimate reason to be there or to know what is there. National estimates put construction equipment theft alone at \$300 million to \$1 billion per year, and only about one in five stolen machines is ever recovered. Building materials, such as windows, appliances, copper, HVAC equipment, and lumber, are not tracked in any single national database at all, which means the true cost is higher than any published number. The hardest case is the one this brief was prompted by: a theft that looks like an inside job. When the people who could have done it include crews, delivery drivers, and anyone they told, cameras alone do not solve the problem. Cameras record; they rarely prevent a person who knows where the cameras are. What reduces theft is shrinking the time material sits exposed, controlling who knows when it arrives, documenting every hand-off, and making stolen items traceable. This brief lays out the national picture, explains why inside theft is so difficult to stop, and gives the layered controls Ducere is adopting on its own projects.

\$300M-\$1B estimated annual U.S. construction equipment theft losses (National Equipment Register)	~1 in 5 stolen heavy equipment recovered; NICB/NER recovery rates have run about 19-23%	+27% rise in U.S. cargo theft losses in 2024, a reminder the delivery chain itself is a target (NICB)	No data there is no national database for stolen building materials; most losses go unreported
---	---	---	--

1. The national picture: what is known, and what is not

1.1 Equipment is measured; materials mostly are not. The best national figures come from the National Equipment Register (NER) and the National Insurance Crime Bureau (NICB), which track insured heavy equipment: skid steers, loaders, tractors, mowers, and trailers. Their estimates of \$300 million to \$1 billion per year, with recovery rates of roughly 19-23%, are the numbers most often quoted in the industry. They describe machines, not materials.

1.2 Why material theft is undercounted. A pallet of windows, a set of appliances, a spool of copper wire, or a stack of lumber usually falls below a builder's risk policy deductible or is absorbed quietly as a cost overrun. It may be reported to local police, but it rarely reaches a national dataset. Builders who have been in the business for any length of time know the problem is real; the statistics simply do not capture it.

1.3 The delivery chain is part of the target. NICB reports that U.S. cargo theft losses rose 27% in 2024, with estimated annual losses of up to \$35 billion. Much of that involves goods in transit, misdirected shipments, and information about loads leaking to the wrong people. For a jobsite, the practical lesson is that the moment of delivery, and everyone who knows about it, is part of the security perimeter.

2. Why construction sites are so easy to steal from

VULNERABILITY	WHY IT MATTERS
Open, partially enclosed sites	Many residential and renovation sites have no fencing, no lockable building until late in the job, and easy road access for a truck or trailer.
Long empty hours	Crews typically leave in the late afternoon; nights, weekends, and holidays leave the site unattended for long stretches.
High-value, uninstalled material	Windows, doors, appliances, HVAC condensers, copper, fixtures, and tools are valuable, portable, and resellable before they are installed.
Untraceable goods	Unlike vehicles and some equipment, most materials carry no title, few serial numbers that anyone records, and can be resold quickly online.
Many people with legitimate access	Multiple subcontractors, suppliers, delivery drivers, inspectors, and visitors, each with crews that change from week to week.
Predictable schedules	Deliveries, crew start times, and installation sequences follow patterns that anyone familiar with the job can read.

3. The inside-job problem

Theft by outsiders is mostly a problem of opportunity: an unlocked site, a visible pallet, a dark street. Theft involving someone connected to the job is a problem of **information**. The person does not need to search; they know what arrived, when it arrived, where it was staged, when the crews leave, and where the cameras point.

3.1 Who knows a delivery happened. The circle is wider than most owners assume: the supplier's order desk and dispatch, the delivery driver and helper, every crew on site that afternoon, anyone those people tell, and neighbors or passers-by who watched the truck unload. Any one of them can pass the information along, and the person who acts on it may never set foot on the site during working hours.

3.2 Why cameras are necessary but not sufficient. Cameras are valuable for evidence, insurance claims, and deterring casual theft. But a person familiar with the site can avoid camera angles, cover their face, use a vehicle without visible plates, or simply act during a recording gap. Recorded footage that no one reviews until the next morning is a record, not a prevention. Cameras work best when they are live-monitored, motion-alerted, cover the staging area and the road entrance, and are paired with the controls below.

3.3 Suspicion is not evidence. When a theft looks like an inside job, it is natural to suspect the crews or the driver. Accusing anyone without evidence damages working relationships and can create legal exposure. The right response is to preserve evidence, give it to police, document facts neutrally, and fix the process so the same opportunity never exists again.

4. The exposure window: the single most useful idea

Most material theft happens in a predictable gap: the hours between when an item is delivered and when it is installed or locked up. The longer that window, and the more of it that falls after hours, the higher the risk. A widely cited U.S. Department of Justice-funded study of residential builders in Charlotte, North Carolina (Clarke and Goldstein, 2003) found that builders who delayed installing appliances until the new owners moved in sharply reduced appliance burglaries. The theft opportunity was simply removed. The same principle applies to windows, doors, and every other high-value item: **shrink the window and you shrink the risk.**

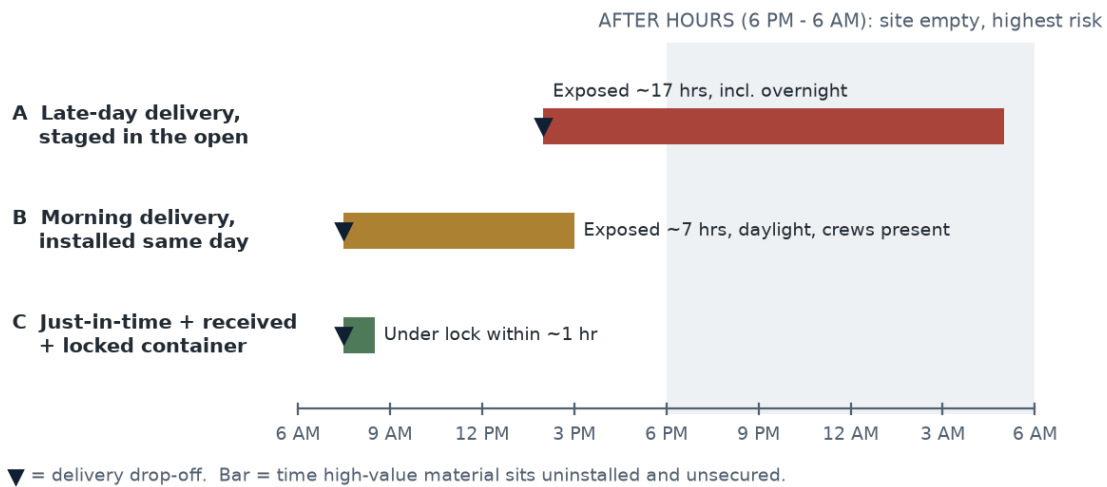


Figure 1 - The exposure window. Scenario A: a late-afternoon delivery staged in the open sits exposed overnight. Scenario B: a morning delivery installed the same day is exposed only in daylight with crews present. Scenario C: a just-in-time delivery, received by a named person and moved straight into a locked container, is secured within about an hour. Illustrative timing.

5. Layered prevention: controls that work even against insiders

No single measure stops determined theft. The goal is layers, so that each layer either shrinks the opportunity, limits who knows about it, or makes the loss traceable and recoverable.

LAYER	CONTROL	WHY IT HELPS WITH INSIDE THEFT
Delivery timing	Schedule high-value deliveries for early morning, never late afternoon, Fridays, or before holidays. Order just in time for installation. Use supplier will-call or yard staging until the install date.	Shortens the exposure window and keeps it in daylight with crews present.
Receiving	No drop-off without a named Ducere receiver on site. The receiver counts, photographs, and signs for the delivery; request the supplier's timestamped proof of delivery.	Creates a documented chain of custody and a clear time stamp if something goes missing.
Secure storage	Install the same day, or move items straight into a locked conex container or lockable room. Keep high-value items out of sight from the street.	Removes the opportunity even for someone who knows the item arrived.
Information control	Share delivery dates and times only with people who need them. Avoid announcing deliveries in group chats. Ask suppliers to limit dispatch details.	Shrinks the circle of people who know what is on site and when.
Traceability	Record order numbers, model and serial numbers, and photos for windows, appliances, and equipment. Mark items with a job ID or paint pen. GPS-tag equipment.	Makes stolen goods harder to sell and easier for police and suppliers to identify.
Access control	Sign-in and sign-out by company and person, unique lockbox codes per trade, codes changed after crew turnover, and one accountable key holder.	Narrows who could have had access and when.
Surveillance	Live-monitored or motion-alerted cameras covering the staging area and road entrance, plate-capturing angle, lighting, and visible signage. Preserve footage immediately after any incident.	Raises the chance of identification and gives police usable evidence.

LAYER	CONTROL	WHY IT HELPS WITH INSIDE THEFT
Contracts	Written custody hand-off when material is released to a subcontractor; the subcontract states who is responsible for material in their care.	Clarifies responsibility and encourages crews to secure what they are given.
Insurance	Confirm builder's risk coverage for theft of materials on site, in transit, and stored off site; know the deductible; keep inventories current.	Turns an unrecoverable loss into a claim, where coverage applies.

6. If a theft happens: the first 48 hours

1. **Preserve camera footage immediately.** Many systems overwrite on a rolling basis; download and save every relevant angle before doing anything else.
2. **File a police report** and get the case number. Provide order numbers, model and serial numbers, photos, and the delivery time.
3. **Call the supplier.** Ask for the proof of delivery: time stamp, GPS location, driver, who signed, and how the delivery was scheduled. Ask them to flag the order numbers in case the items surface.
4. **Document facts neutrally.** Record who was on site, when crews left, and what each person observed. Avoid accusations; let evidence and police lead.
5. **Change access** immediately: lockbox codes, keys, and gate combinations.
6. **Notify the insurer** under the builder's risk policy and keep all records.
7. **Watch resale channels.** Check local online marketplaces for matching items; for metals, Georgia's secondary metals recycler rules require recyclers to keep seller records, which police can use.
8. **Re-order on a just-in-time basis** and close the gap that allowed the loss before the replacement arrives.

THE DUCERE STANDARD

Shrink the window. Control the information. Document every hand-off. Ducere schedules high-value deliveries for the morning of installation wherever practical, requires a named receiver to count, photograph, and sign for every delivery, secures or installs material the same day, limits who knows delivery details, and records serial and order numbers so stolen goods can be identified. Cameras support these controls; they do not replace them.

Sources: National Equipment Register, Equipment Theft Report (annual loss estimates of \$300 million to \$1 billion); National Insurance Crime Bureau and NER equipment theft data (recovery rates of roughly 19-23% across recent reporting years); NICB, Cargo Theft (2024 losses up 27%, estimated annual losses up to \$35 billion); R. Clarke and H. Goldstein, Reducing Theft at Construction Sites: Lessons from a Problem-Oriented Project, U.S. Department of Justice, Office of Community Oriented Policing Services, 2003 (NCJ 201249). National figures vary by source and year and largely exclude building materials. This brief is informational and does not constitute legal or insurance advice; confirm coverage terms with your insurance professional.