

WorkSafeBC reinforces exercising caution around concrete blocks

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VANCOUVER — Concrete locking blocks, a common sight at construction sites, can be a serious hazard if moved improperly.

WorkSafeBC recently issued a bulletin reminding workers of some of the risks and best practices for using them.

Concrete locking blocks are used to build silos, containment bunkers, barriers and retaining walls. Because the blocks are made by a wide variety of companies, they vary in design, manufacturing, quality, strength and durability from site to site. Since they are often reused, their age can also vary.

The main risk from concrete lock blocks arises from moving them. Blocks are often moved from one location to another on worksites or stacked on top of other blocks. On many worksites, the blocks are lifted using hooks through a “lifting eye” on the top of each block. The lifting eye is usually made of wire, but it may also be rebar, metal rod or steel, explains a release.

Corrosion or lifting the block too many times can cause the lifting eye to wear out and fail.

According to WorkSafeBC, most manufacturers only rate lifting eyes on blocks for three lifts.

These lifts are usually from mould to storage, from storage to truck and from truck to worksite. After these three initial lifts, the eyes on most blocks are no longer considered safe points of attachment. Generally, there are no design requirements for the block or lifting eye.

A failed lifting eye can have devastating consequences, WorkSafeBC warns. If a crane lifts a locking block and the block drops, the crane can be thrown off balance and tip over. Both the falling block and the tipping crane can cause serious injury or death as well as damage equipment and property.

WorkSafeBC states some blocks can break at what is called a “cold joint.”

A cold joint results when the block’s mould is only partially filled with cement, allowed to harden, and then another layer of cement is added. On the job, there is no way to tell if a locking block with cold joints is adequately reinforced.

WorkSafeBC advises having a safe lifting plan in place before moving concrete locking blocks at a worksite. Workers should also be instructed in the plan and be provided with adequate supervision.

WorkSafeBC also advises that before every lift, crews should refer to industry best practices and assess the risks. Crews should consider the safest way to move the block and ensure that all workers are in a safe position during the lifting process.