



Construction Fact Sheet

An Innovation for Slab Bulk Heads

The Problem

- When building and installing bulk heads wood is used, usually scrap material from the site.
- Constructing bulk heads involves a number of awkward postures, including stooping or kneeling
- These tasks are often highly repetitive as the bulk head can be quite large depending on the building size.
- There is also high demand associated with the demolition of the wooden bulk heads.
- These factors may contribute to an increased risk of injury to the worker.



Traditional wooden bulk head can be seen in the background.

One Solution

- Use steel mesh bulk head instead of plywood and other wood products.
- The amount of physical demand associated with the construction process is reduced.



Mesh bulk head.

<http://amico-stayform.com/index.htm>

How It Works

- Sheets of steel mesh are cut to size by workers using manual or powered snips.
- The individual metal sheets are used similarly to the traditional method using plywood. The sheets are installed using 2x4s or other lumber.
- The thin sheets of metal can be easily pierced with rebar and conduit so that holes do not have to be drilled when these have to be passed through the bulk head.
- The steel bulk heads remain in place once the concrete has set and assist in the adherence of the adjacent slab.

Benefits

- The steel sheets are significantly lighter than plywood sheets and decrease the physical demand associated with this type of work.
- Metal bulk head sheets can be constructed and installed faster than using plywood and do not have to be removed after the slab has set. This reduces the amount of time spent doing this demanding work.
- Tasks such as cutting holes into the plywood for rebar and conduit are eliminated entirely. This task traditionally requires the use of hand tools in awkward postures.
- A decrease in awkward postures, forces and repetitions reduces the risk of injury from this type of work.
- The amount of waste associated with bulk heads is reduced since they are 'stay-in-place'.

For More Information

- Products may also be found on the internet using the following search terms: "stay in place concrete forms."
- Manufacturers, suppliers or rental companies of other stay in place forms may be another source of information on products.
- For general information on this solution, call the Infrastructure Health and Safety Association at 416-674-2726 or 1-800-781-2726.