Relocatable Safety Enclosures

Using standard building materials, we created an entirely new way to provide a flexible and reusable safety barrier to protect D.T.E. employees from on-going construction projects in occupied areas of the Headquarters building. This enclosure effectively replaced the combination of construction barricades, caution tape, and signage previously used in the past.

For the escalator replacement project, the following criteria were given to us by D.T.E. Facilities Design and Construction department:

- Build a solid and safe enclosure around the escalators, to allow for demolition and construction of new escalators over a lengthy period of time. We will need to allow the daily passing of hundreds of people traveling up and down the stairs, within inches of the escalator construction.
- Build this enclosure from start to finish in one weekend; remove this enclosure within hours to allow escalator demolition. Rebuild within hours notice, ready for typical Monday morning employee foot traffic. All total, we will need seven phases of build, move, and relocate.
- We must also contend with a 15-foot high ceiling, (35) treads of stairs, and approximately 80-feet of protected area in total.
- Our requirements were to build it strong, fast, economical and adjustable with the ability to remove and rebuild it in a new location under a very short period of time.
- With all of the above, it must be noted that this is the Headquarters of D.T.E. Energy, and this is must be presentable to the general public over an extended period of(S) months.
- Pat Altovilla, our superintendent representing the Gardiner C. Vose Company, and myself, came up with this successful idea of using “Unistrut” structural steel framing components along with conventional “drywall framing” and a “medium density fiberboard” wall material, as well as doors.

Our solution was cost effectively implemented and safely utilized on this project, saving D.T.E. thousands of dollars. Equally important, it can be used and reused on any other future construction project for years to come. It can also be duplicated, as necessary, in other D.T.E. facilities corporate-wide.