

---

## DUMB WALLS: MODULAR PARTITIONS

We experimented with several modular partition assemblies to increase the speed of construction, provide flexibility to easily reconfigure the space, and minimize waste. Four general wall types were used on the project and are described in more detail below.

---

### Description:

#### Stick-Built Walls

- Office fronts and conference room walls were conventionally constructed using sheetrock and studs.
- Advantages are that this is the industry standard construction assemble, little risk.
- Disadvantages are that walls take a long time to frame and finish, and are not reusable.
- Missed opportunity was to borrow from the homebuilding industry and “panelize” office fronts off site and hoist to floor with wheat wall panels.

#### Wheat Walls

- Most offices are demised by compressed wheat straw panels joined with wood splines.
- Gravity connection at floor, blocking with kicker above ceiling.
- Panels are all natural, low VOC, non-combustible and FM rated.
- Each 4' x 9'-4" panel weighs 150 pounds and provides a high STC rating.
- Panels hold fasteners well and eliminate the need for blocking.
- Favorable tax treatment by the IRS.
- Disadvantages are that panels make a mess when field cut, and are difficult to handle. Panels do not look like traditional walls.
- Missed opportunity was to prime/paint and attach splines off site, yielding a true modular assembly.

#### “Foam Walls”

- We experimented with an assembly of ½" GWB glued to a core of polyisocyanurate foam assembled in a tongue-and-groove manner with taped joints.
- Researched alternative core materials such as cardboard honey comb, homosote, and aluminum honeycomb.
- Success in making a conventional-looking wall out of modular components.
- Disadvantages are that foam is messy to cut, fussy blocking and anchoring details, not very good acoustically. Limited ability to reuse.

#### Starwall

- We installed an off-the-shelf modular partition to compare with conventional and our innovative wall types.
- Starwall is a modular partition that uses sheetrock (or other panel materials) assembled with a system of aluminum extrusions.
- Advantages are fast and clean installation, easy reconfiguration, and tax advantages. Wall system is part of a system of modular glass, doors and other accessories.
- Disadvantages are do not look like traditional partitions.

### Resources:

For wheat straw panels: [www.ortech.com](http://www.ortech.com)

For Starwall: [www.spaceworksai.com](http://www.spaceworksai.com)