Yellow Team Sketch Models
Living and Working in Constrained Space
Movable Walls: concept

- Modular room dividers
- Home or office use
- Adds flexibility to constrained spaces
Movable Walls: prior art

Requires permanent installation in ceiling
Movable Walls: prior art

Partial height
No sound insulation
Limited privacy
Movable Walls: concept

- Floor-to-ceiling fit
- No tracks
- Stable and secure
- Sound and thermal insulation
- Store 12 ft of wall under double bed
Movable Walls: market

• Target customers:
  • homeowners without resources for renovation
  • residents of studio apartments
  • Households of growing families.

• Current market leader in decorative moveable walls has $66 million in US sales (2007).
Movable Walls: technical challenges

• Ceiling interface
  • Ensure stability without damage
  • Estimated 2 psi pressure required
• Impact loading considerations
• Possible solutions
  • Flanges
  • Surface choice
Movable Walls: technical challenges

- Interconnection of panels
- Keeping mechanisms discreet
- Width flexibility
- Doors
- Aligning the panels during assembly