

TrussWall vs. CMU Construction

TrussWall, Trussbilt's steel panel wall system, is the lightest and most secure cell system available. It offers owners, architects and general contractors significant advantages over masonry cell construction, meeting your needs for superior security, design flexibility, cost savings, a faster construction schedule and LEED credits.

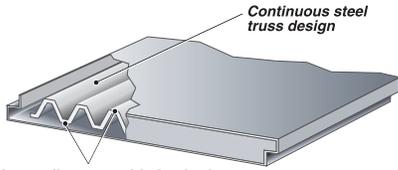
Requirement	CMU Cell Construction	 TrussWall	TrussWall's Advantage	Who Benefits?
Security	Concrete construction	Steel construction	Enhances strength, assuring owners of the strength of steel in every cell	Owner, Architect
	8" interior cell walls	2" concrete filled panels	Enhances strength and acoustics (STC 45-49) to minimize noise	Owner
	ASTM F2322 compliant if steel reinforced and fully grouted	ASTM F2322 compliant	Exceeds industry standard for attack prevention	Owner, Architect
Design Flexibility	Flexible but labor intensive	Customizable/flexible	Lets owners choose cell sizes with ease without increasing labor costs	Owner, Architect
	Heavy CMU walls (~90 lb/sq ft)	Lightweight panels (~30 lb/sq ft)	Gives more site selection flexibility, making high rise facilities and project sites with poor soil conditions more viable	Owner, Architect
	Heavy CMU walls (~90 lb/sq ft)	Lightweight panels (~30 lb/sq ft)	Facilitates retrofits of existing commercial structures for use as correctional facilities	Owner, Architect
	Requires field customization for every MEP connection	Factory supplies custom MEP preparations	Provides consistent compliance with Architect's design	Owner, Architect, GC
	Multiple embeds required for furniture locations	Furniture welded directly to TrussWall	Supports customizable and flexible furniture installations which stay secure over time	Owner, Architect
Cost Savings	8" thick walls	2" thick panels	Reduces space requirements or allows more cells per module (see reverse)	Owner
	Heavy CMU walls (~90 lb/sq ft)	Lightweight panels (~30 lb/sq ft)	Reduces foundation requirements	Owner
	Longer construction schedule	Shorter construction schedule	Reduces time/cost for General Conditions	Owner, GC
	Many masons required	Can be installed by carpenters, iron workers and general laborers	Utilizes plentiful labor force, driving down cost	Owner, GC
	Installation tolerances require shimming, leveling and anchor bolts to install sliding devices	Virtually no shimming required for installing sliding devices, which can be welded directly to TrussWall panels	Saves ~25% of sliding device installation time	Owner, GC
	CMU walls can be installed only when frames are on-site	Frames are factory installed	Saves ~90% of frame installation cost	Owner, GC
	8" thick walls	2" thick panels	Reduces long-term operational costs for staffing, energy, etc.	Owner
Faster Construction Schedule	Slow installation process	Quick installation process	Allows greater scheduling flexibility to get cells off critical path in construction schedule sooner	GC
	Messy and congested installation process, scaffolding required	Simple and clean installation process	Allows other trades to work at the same time as TrussWall installation	GC
	Large crew needed for installation	Typical 4-6 man crew for installation	Reduces congestion at the jobsite, promoting higher productivity for all trades	GC
	Inconsistent MEP preparations	Factory designed and installed MEP preparations, identical at each cell location	Facilitates near-assembly line efficiencies	GC
	Requires on-site opening preps and frame installation	Factory-installed frames; job not dependent on hollow metal delivery	Reduces on-site installation requirements, speeds up schedule, improves quality and consistency	GC
LEED	Limited recycling possibilities	Steel can be 100% post-consumer recycled	Meets LEED credits for recycled material	Owner, Architect
	High weight and space requirements	Thin and lightweight panels	Reduces material use, allows synergistic gains from LEED integrated design	Owner, Architect



Trussbilt

Leading Innovator of Security Products for Over 80 Years

Designing with TrussWall vs. CMU Construction



Continuous steel truss design

Internally spot welded to both face sheets 3" on center

TrussCore is a truncated, triangular-shaped, roll-formed steel truss that spans the full width and height of TrussWall panels.



CMU block construction site - Exposed to weather and subject to delays



Kankakee County, IL Detention Facility - Finished TrussWall cells

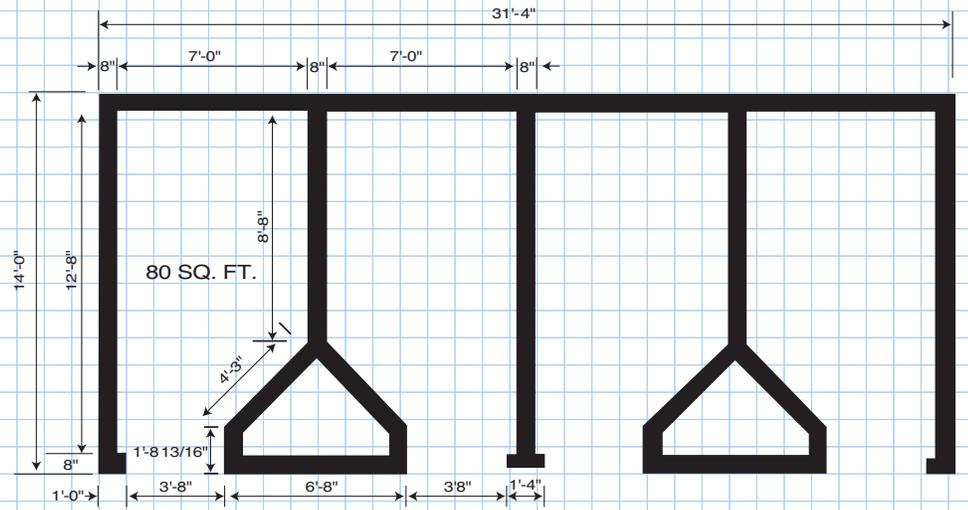


Kankakee County, IL Detention Facility - Rear chase mechanical corridor with identical connections

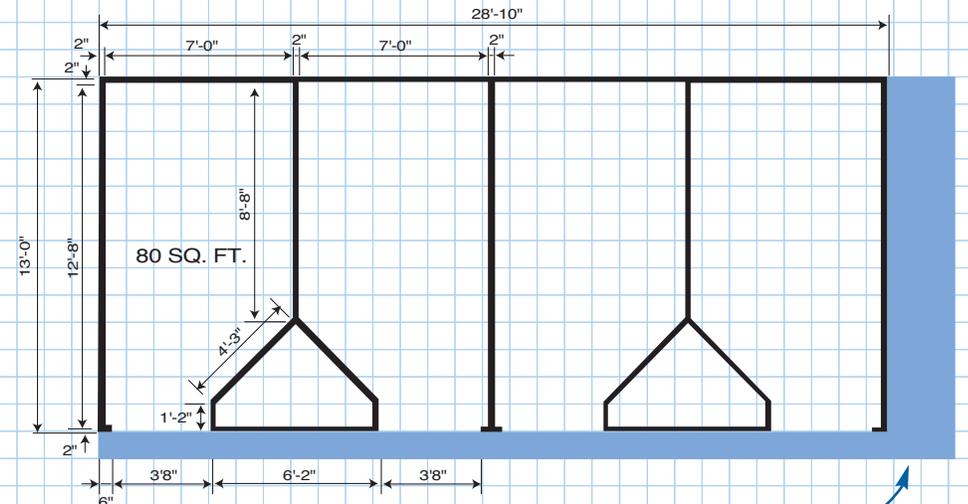


Kinney County, TX Detention Facility - Four man cell installed

CMU CONSTRUCTION LAYOUT



TRUSSWALL LAYOUT



64 sq. ft. saved (15%) per 4 cells



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