



THE BEST PANEL SYSTEM SINCE 1970

A Thermasteel Preferred Partner

JUNE 2021



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Preferred Partner

PANEL SYSTEM HISTORY

In 1970 Luther Dickens, a chemical engineer experimented at home the idea of creating a composite wall system. Little did he know, the experiment would become a world changing building system - Thermasteel. Today, 51 years in business, this steel sip replaces framing, insulation, sheathing, and vapor barrier. All panels include a thermal break between the interior and exterior face of the wall. The panel range is based on 25 patents and includes exterior walls, interior walls, floors, roof, concrete floors and even foundation panels. All energy efficient true load bearing and proudly made in the USA in a 100% waste-free production facility



TECHNOLOGY

- Based on proprietary knowledge of 25 patents
- 2 parallel light gage steel frames (ext. + Int.) With a bonding agent is in a press and injected with a modified grade EPS
- Creating a panel 4'x12' with an average weight of 45lb
- Panels are available at 3.5" ; 5.5" ; 7.5" thickness
- Equivalent thermal performance up to R61

STRONG LIGHT AND EASY TO BUILD



TECHNOLOGY



- 8 CSJ studs per panel – makes the panel very strong
- A complete thermal break

Hurricane certified panel

APPLICATIONS

- The only panel system that provides **the entire building envelope**
- Pre-engineered to create the entire envelope: including, beams, columns, openings
- Up to 6 stories high with no additional support (no height limitations if used with additional structural elements such as concrete / red iron)



- Exterior walls
- Interior walls
- Floors
- Roof
- Foundation
- Shear walls

COMPLETE BUILDING SYSTEM



- All rough openings – premade
- No height restriction
- Big span (110/35 ft)
- Interior partitions
- Concrete floor panels



THERMASTEEL – WORLD RECOGNITION

- 51 years of international experience, +75,000 projects
- Approved building system IN over 83 countries worldwide
- APPROVED FOR THE EUROPEAN UNION SINCE 2022
- Industrial, residential, hotels, offices, emergency housing, student housing, hospitals, military and naval, storage, tiny homes, coolers.....
- German government, Australia, Guam, Russia Iran, India, Iceland, UK, France, Mexico, Switzerland, Turkey, Canada, Thailand, Taiwan and many others

Single-Family, Multi-Family and Commercial Applications



NOTABLE THERMASTEEL CLIENTS



EMERGENCY HOUSING FOR THE D.O.D.

Developed May 2020
Delivered Dec 2020



PANEL CHARACTERISTICS

Table 8d. 7.5-inch-thick panel with 362S162-mils type studs at 12" o.c.; no gypsum or siding.

		Axial Distributed Compression (plf)		Transverse loading (psf); EPS: 1.5 pcf density					
		LRFD, LSD	ASD	LRFD, LSD	ASD	Service loads (psf)			
Gauge	Ht (ft)	(ϕ pn)	(pa)	(ϕ wn)	(wa)	L/180	L/240	L/360	L/480
20	8	11,149	8,345	450	281	166	125	83	62
20	9	11,149	8,345	356	222	137	103	69	51
20	10	11,149	8,345	288	180	135	101	67	51
20	12	11,149	8,345	200	125	108	81	54	41
18	8	15,888	11,892	576	360	173	130	87	65
18	9	15,888	11,892	455	284	143	108	72	54
18	10	15,888	11,892	368	230	138	104	69	52
18	12	15,888	11,892	256	160	114	85	57	43
16	8	21,369	15,995	715	447	188	141	94	70
16	9	21,135	15,819	565	353	182	137	91	68
16	10	20,875	15,625	457	286	145	109	73	55
16	12	20,287	15,185	318	199	120	90	60	45
14	8	44,208	27,630	1089	680	195	146	98	73
14	9	43,722	27,326	860	538	208	156	104	78
14	10	43,186	26,991	697	436	197	148	99	74
14	12	41,968	26,230	484	302	155	116	77	58

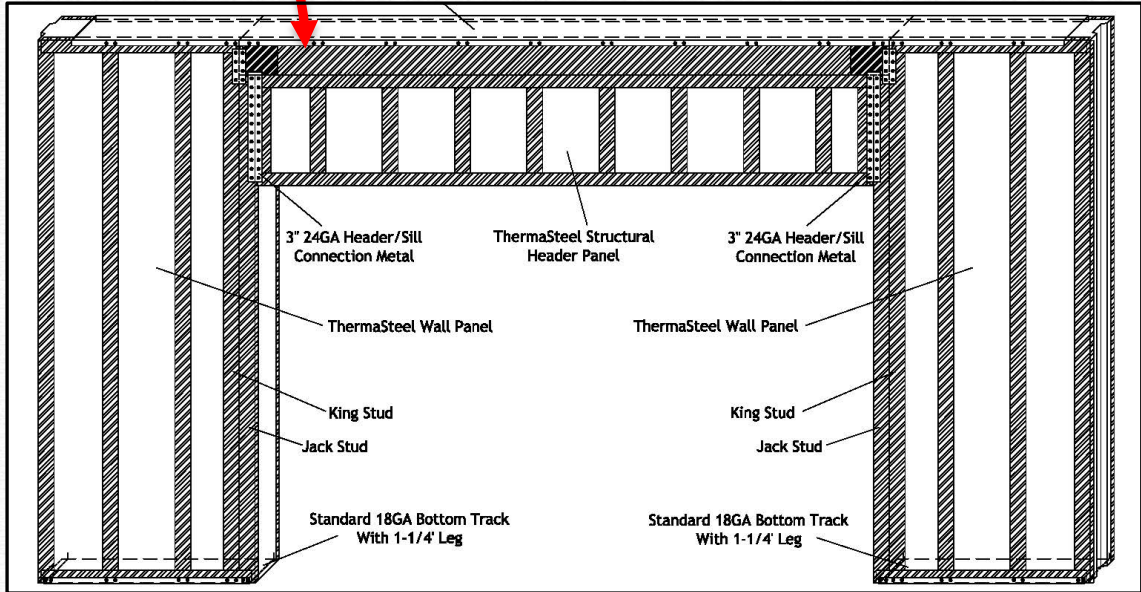
All strength values account for local buckling, yielding and lateral buckling

ASTM E72 Axial distributed compressive loads are applied at $e=t/6$

LRFD, LSD Capacity reduction factor, $\phi = 0.8$ axial & flexure; ASD safety factor = 2.0

Up to 42,000 Lbs per LF + safety factor

<http://www.cdp.builders/documents>



CODE COMPLIANCE AND CERTIFICATIONS

- USA IAPMO report 0128 construction type ii-iv
- Russia seismic approval for 9.5 Richter scale
- UK BBA approval 1991
- Canada
- Florida state approval – hurricane certificate
- 2hr load bearing fire assemblies
- Acoustic rating STC +58
- ASHRAE 90.1
- LECC 2022 / NREL
- ASTM and AISI

- IBC and IRC 2020
- HUD approval
- CALIFORNIA TITTLE 24, Energy Codes
- LA LAR
- European Union
- Florida Building Code 2020
- 2hr load-bearing
- Smoke and fire spread
- SAM registration
- HUD



THE ONLY HOUSES THAT SURVIVED HURRICANE IVAN



ADVANTAGES IN APPLICATION

- Structure, Insulation, Vapor Barrier, Sheathing – **All In One**
- No Need For Continuous Insulation On Exterior Walls
- No Material Loss On Site
- No Debris = No Dumpster On Site
- 35% Less Scaffolding
- Save Over 50% On Labor
- Reduce Construction Time By 40%
- R-value UP TO R61
- Savings of 70-85% in Energy Bills. Downsize HVAC BY 2/3
- Major Load Reduction Of The Structure – Downsize Foundation
- No Mold And Mildew
- No Termites
- Non-combustible Assembly



FOURINONE

**STRUCTURE
INSULATION
VAPOR BARRIER
SHEATHING**

**Over 70,000
Completed
Projects in 28
Countries**

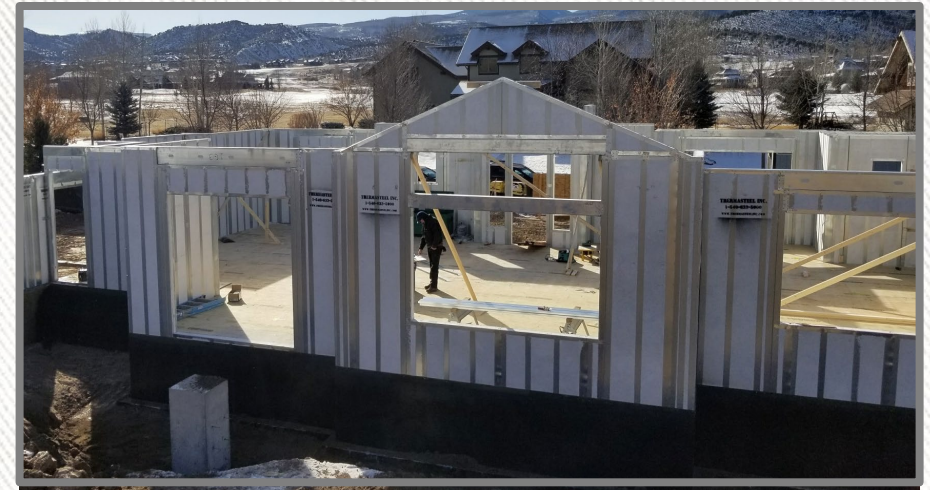
SPEED AND EASE OF CONSTRUCTION



Day 1



Day 2



Day 4

Day 5



Day 6



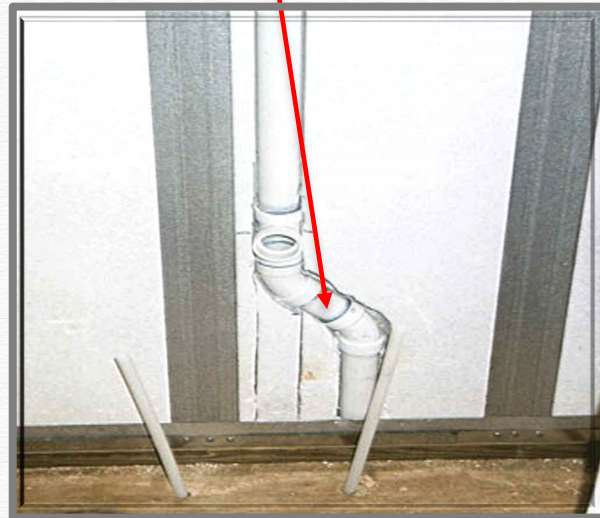
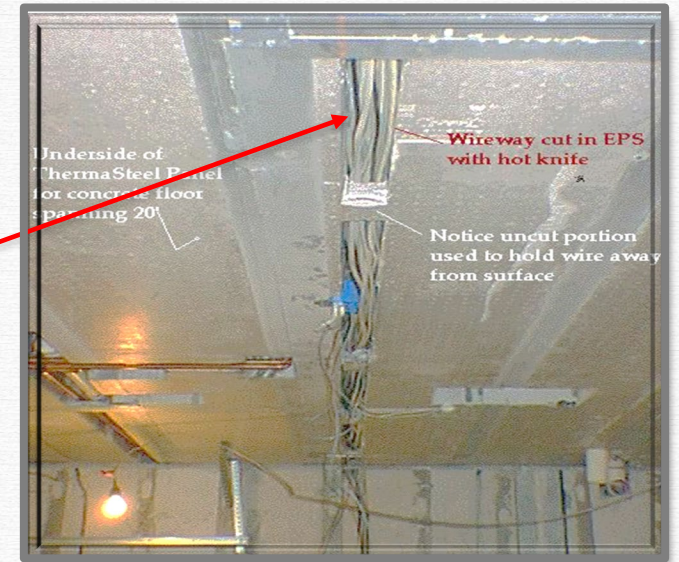
Day 7



UTILITIES ARE MADE SIMPLE



- Standard electrical boxes
- No need for drilling studs
- Panels are pre chased
- Standard plumbing



USER FRIENDLY PROCESS

10 days

- Estimate**
- ✓ Define with client scope of work (SOW)
 - ✓ Evaluating plans and creating rough estimate per SOW.
 - ✓ Sign estimate (P.O.) Receive 10% payment nonrefundable for drafting.
 - ✓ Conference call with all involved.
 - ✓ Receiving all needed drawings (Arc +Str).

60 days

- In the process**
- ✓ Panelize walls. Receive design approval / corrections for dimension and rough openings.
 - ✓ Drafting fully coordinated S.D. including all engineering info. Receive final approval from Client, Engineer, Architect.
 - ✓ Calculate final cost and create invoice with final amount.
 - ✓ Receive 50% payment and move to production.

10 days

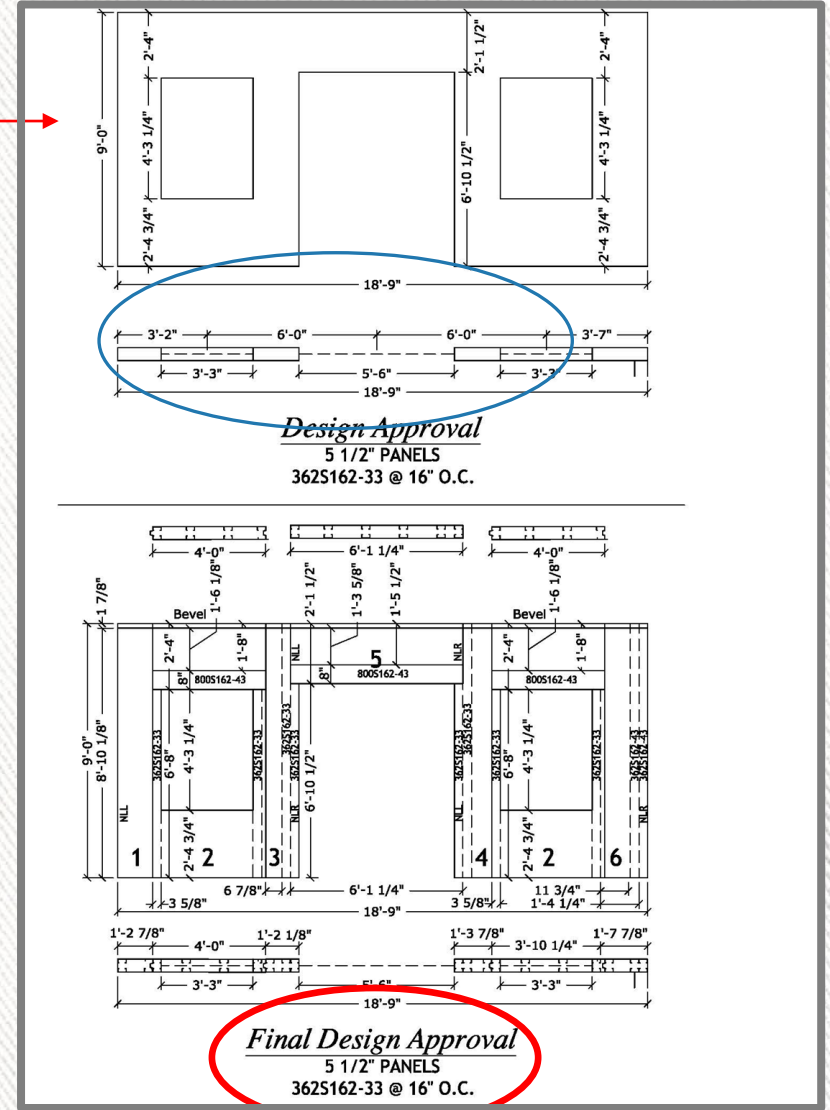
- Before shipping**
- ✓ Send client invoice for remaining balance and receive payment 5 days prior to shipping.
 - ✓ Provide client shipping with quotes and connect the shipping carrier with client.
 - ✓ Provide Client with a shipping date.
 - ✓ Load and ship panels.



USER FRIENDLY PROCESS

Project drawings

No design limitations



BAILOR UNIVERSITY DORMS



US ARMY – HOUSING FOR TROOPS IN THE MIDDLE EAST

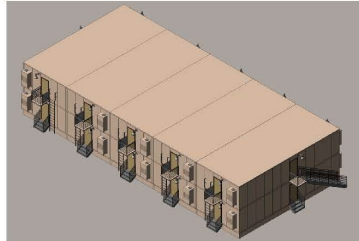
FOR MORE INFORMATION

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MEES 800 MODULAR ENERGY EFFICIENT STRUCTURE



FINISH APPLICATIONS

- THE FACE OF THE PANEL IS SMOOTH WITH 3 5/8" STRUCTURAL STUDS EVERY 16" O.C READY TO RECEIVE EXTERIOR SKIN WITHOUT NEED TO FURRING OUT OR SHEATHING
- FULL BRICK WITH DRAIN PLAIN
- BRICK VENEER
- EIFS, S.T.O, DRYVIT
- HARDY BOARDS, WOOD PLANKS, SOLID WOOD
- SIDING, M.G.O, CEMENTITIOUS BOARD
- HYDRO INSULATION, T.P.O.
- ALUMINUM, ALUCOBOND, METAL SHEETS
- AND SO MANY OTHERS...



SHIPPING

- Average panel weighs 45 Lbs
- Up to 6,000 sq ft on every truck load
- Bundles are marked and staged
- Track, screw, headers, sills, and even bits are included



USEFUL LINKS

OUR HOME PAGE:

[HTTPS://WWW.CDP.BUILDERS/](https://www.cdp.builders/)

BALLISTIC APPLICATION:

[HTTPS://WWW.YOUTUBE.COM/](https://www.youtube.com/)

HOW IT'S MADE:

[HTTPS://WWW.YOUTUBE.COM/](https://www.youtube.com/)

CONCRETE FLOOR PANEL SYSTEM: [HTTPS://WWW.YOUTUBE.COM/](https://www.youtube.com/)

**Thank you for helping us create
more effective building products, and a cleaner environment**



Preferred Partner



CDP

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MADE IN USA



70,000 PROJECTS 28 COUNTRIES

INSULATED PANELS FOR
COMMERCIAL, RESIDENTIAL,
INDUSTRIAL BUILDINGS



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