

United
States
of
America

To Promote the Progress



of Science and Useful Arts

The Director

of the United States Patent and Trademark Office has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Katherine Kelly Vidal

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

CLIMATE TECH

BUILDING SYSTEMS™



a par·a·digm shift in building

2024

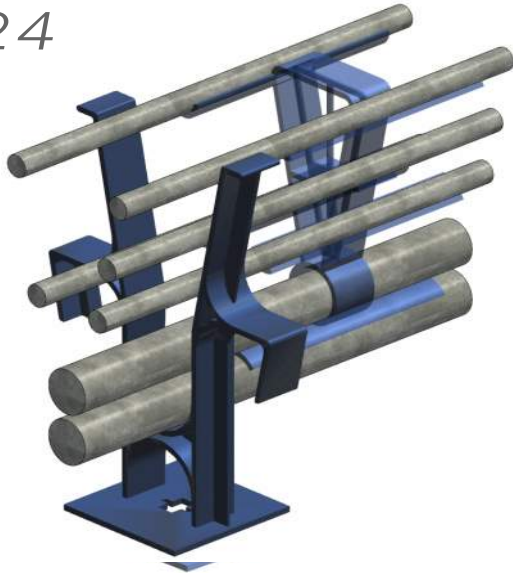


Figure A - CTBS Rebar Beam, Chair & Tree

1961

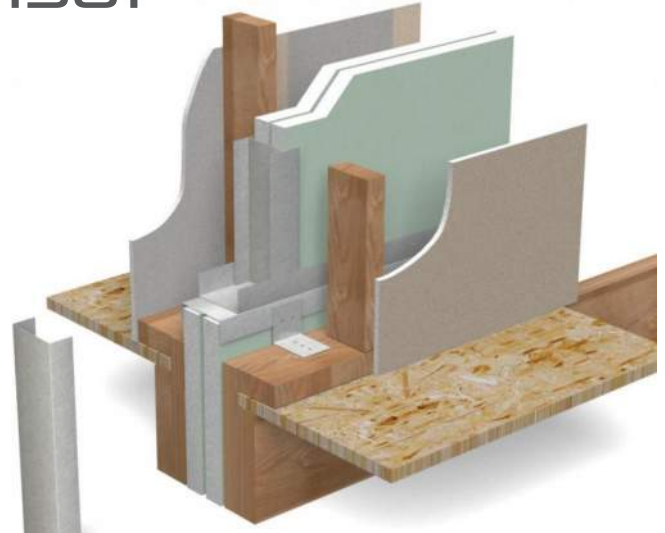


Figure B - Party Wall - Drywall was invented in 1961

Overview

(CTBS™) replaces lumber and represents a fresh and innovative approach to constructing steel-reinforced concrete floors, roofs, and walls. Our models indicate that utilizing CTBS™ will yield substantial cost savings compared to traditional methods of building with concrete. There are many benefits to using steel reinforced concrete in construction.












Building with steel reinforced concrete makes floors roofs, and walls.



Figure 1 - Prototype of Climate Tech Building Systems Floor, Climate-Deck™

U.S. Patent No. 12,188,232 on January 7, 2025

Copy Right © | Climate Tech Building Systems™ |

-  Lower insurance rates guarantee
-  Quieter - high STC ratings
-  High wind resistant
-  Stronger - Stiffer
-  Fire safe
-  Component longevity
-  Thermal mass of concrete means lower energy bills
-  Insect resistant
-  Mold resistant
-  Bullet resistant
-  Recyclable

| www.climatebuilt.com

2024 = TREE FREE CARBON

Applicable to All Building Types:

1. CTBS™ can be used in commercial, industrial, and residential building projects.

Using this new system, only one trade is needed to complete the structural steel rebar, concrete, fire protection, insulation, and finished ceilings.

Climate-Deck™ provides 90° mechanical openings with trunk line openings up to 23" x 11" and 10" diameter round duct openings. HVAC and plumbing do not have to be hung or furred around, CTBS™ is the only one that can do this.

2. CTBS™ replaces wood and other concrete construction methods with superior quality buildings while saving money on materials and labor.

3. Our technology goes beyond homes, transforming various building types. It covers everything from commercial spaces to industrial complexes, including rapidly growing segments like Tilt-Up construction. CTBS™ provides a universal solution for sustainable and innovative construction.

The work of multiple trades can be done by a single trade. A comparison analysis of the different building processes suggests that there may be as much as 30–40% savings in labor when using CTBS™.

Cost Competitiveness

A detailed estimate of a typical wood framed floor showed costs were \$31.47/SF. The estimated cost of a CTBS™ concrete floor (with expanded polystyrene insulation) was \$21.89/SF – a 30% savings of almost \$10.00/SF. Some cases may require shoring which would bring the SF cost to \$31.14/SF – still less expensive than a wood floor. It is expected that there will be a small savings in material costs and a much larger savings in labor costs when compared to conventional concrete floor systems because Climate Tech floors will normally not need shoring.

CTBS™ concrete floors, roofs and walls are made of concrete, steel, expanded polystyrene, and polycarbonate fasteners and imbeds. Most of these materials are sourced locally. The rest can be delivered to the job site.

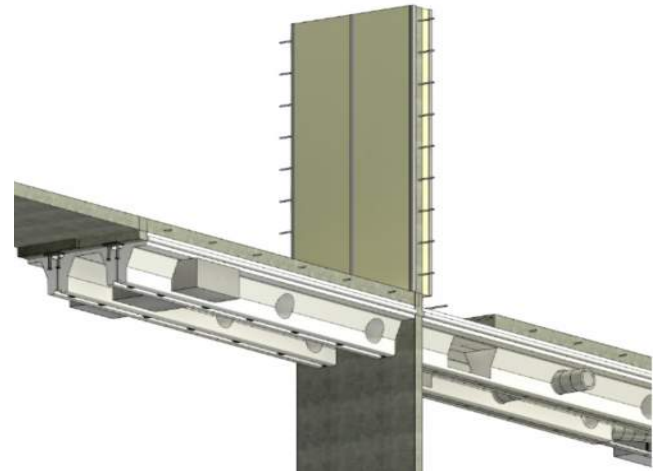
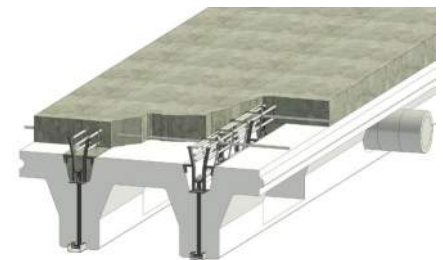
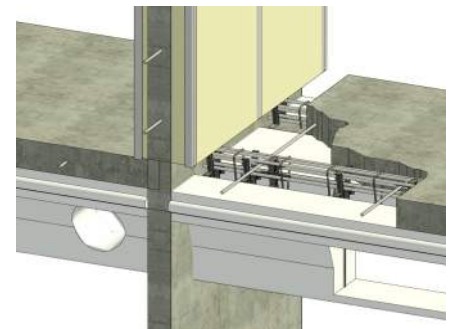


Figure 2 - Climate-Deck™ allows for mechanical penetrations at 90° through the deck.



CLIMATE-DECK™



CLIMATE-TIES™



CLIMATE-WALL™

U.S. Patent No. 12,188,232 on January 7, 2025