

SUPPORT FACILITIES

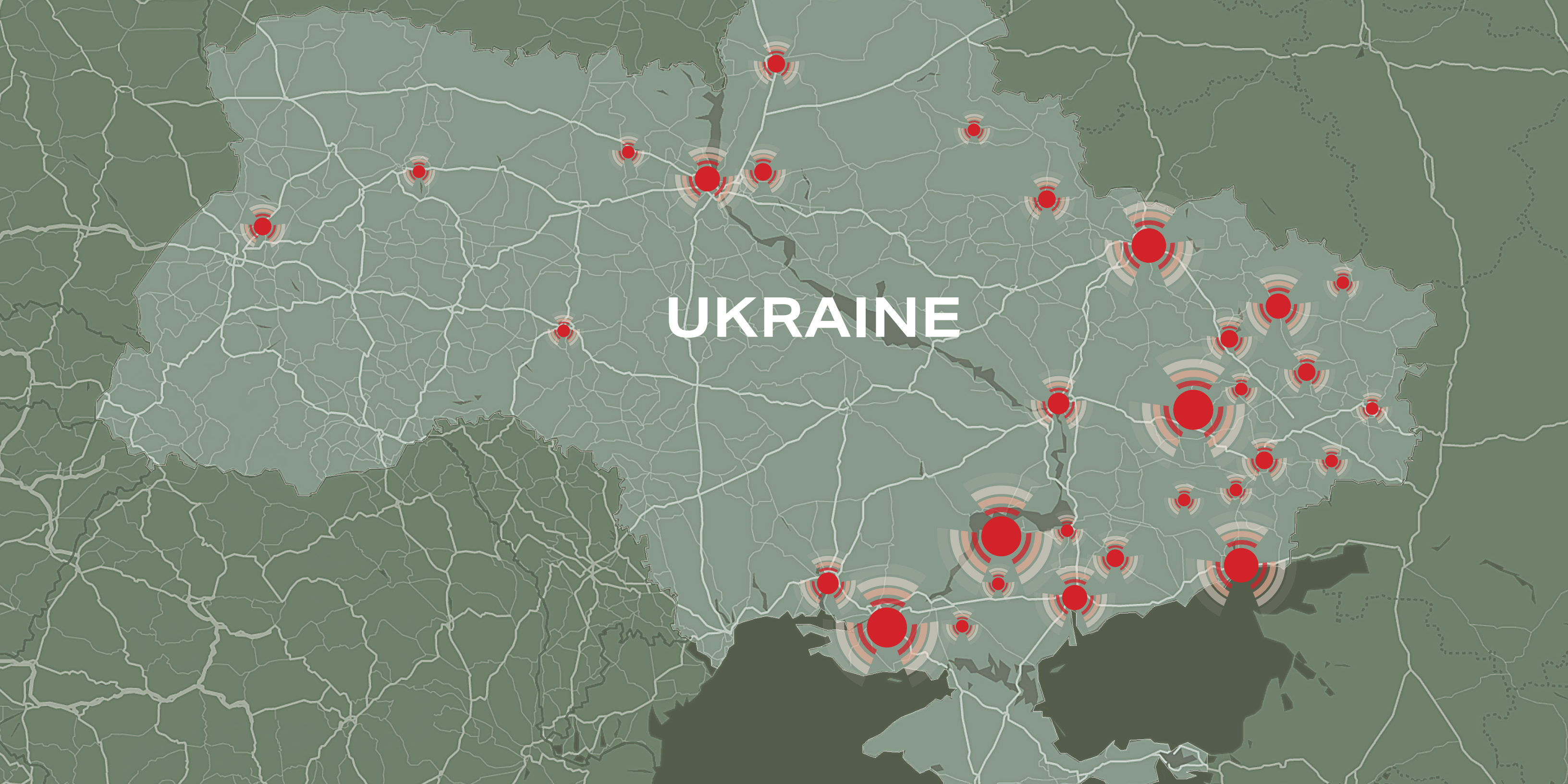


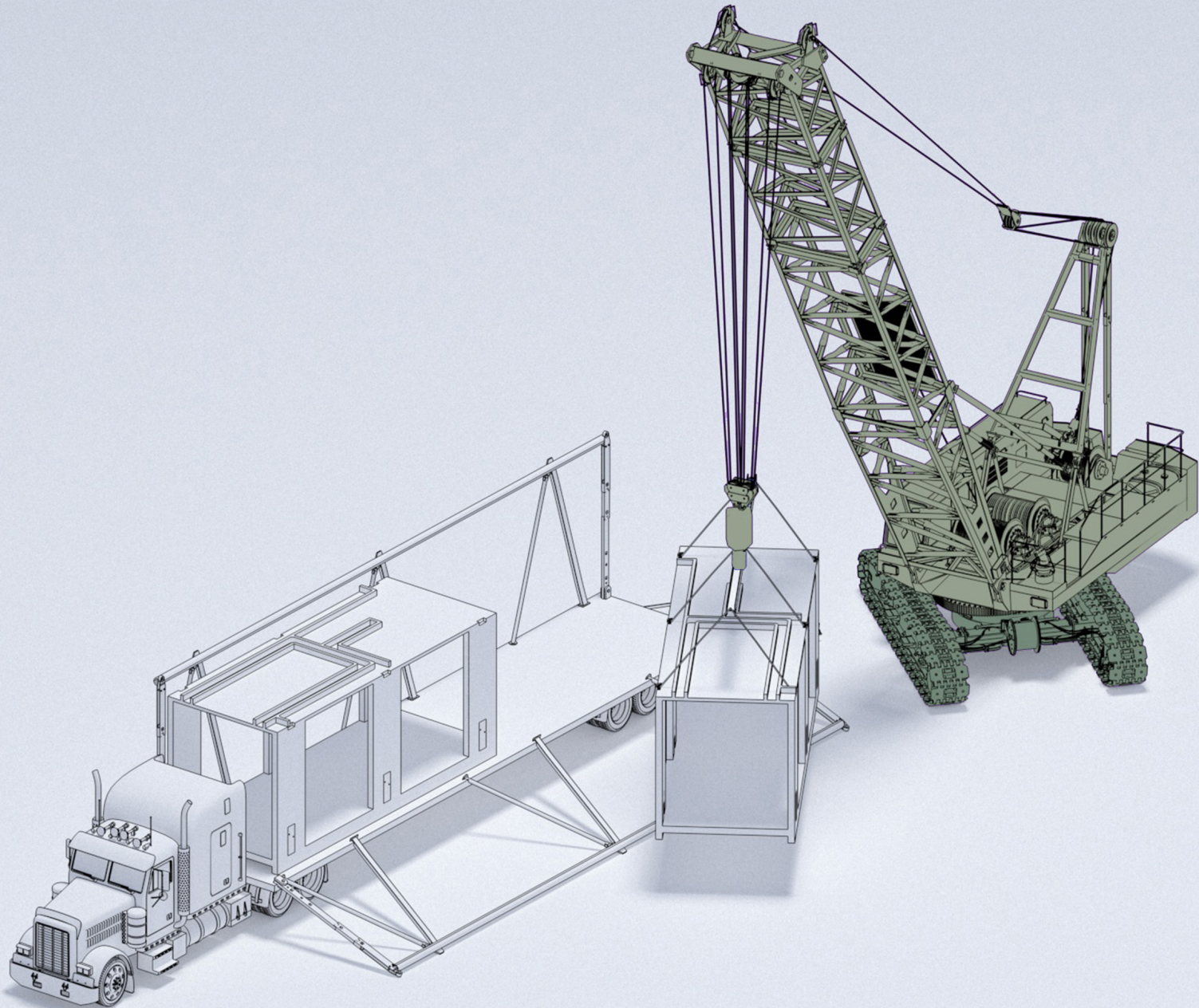
VERSION 1.0

REBUILDING UKRAINE
POWERED BY HEIMDALL RISK ADVISORY

SPEEDSTAC

UKRAINE





Statistics

140 000



APPROXIMATELY 140,000 BUILDINGS HAVE BEEN DESTROYED AS OF AUGUST 2023 AS A RESULT OF THE WAR IN UKRAINE

22 300



ACCORDING TO THE UN HIGH COMMISSION FOR HUMAN RIGHTS (OHCHR), DURING 2014-2022, THE WAR IN EASTERN UKRAINE RESULTED IN MORE THAN 22,300 MILITARY AND PERSONNEL BEING WOUNDED

4 900



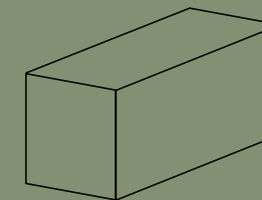
ACCORDING TO THE UN HIGH COMMISSION FOR HUMAN RIGHTS (OHCHR), DURING 2014-2022, THE WAR IN EASTERN UKRAINE HAS COST THE LIVES OF MORE THAN 4,900 UKRAINIAN MILITARY PERSONNEL

2,7 million



ALMOST 2.7 MILLION UKRAINIANS HAVE RETURNED HOME SINCE THE MASS EVACUATION WHICH STARTED AFTER FEBRUARY 24, 2022

Speedstac
Size

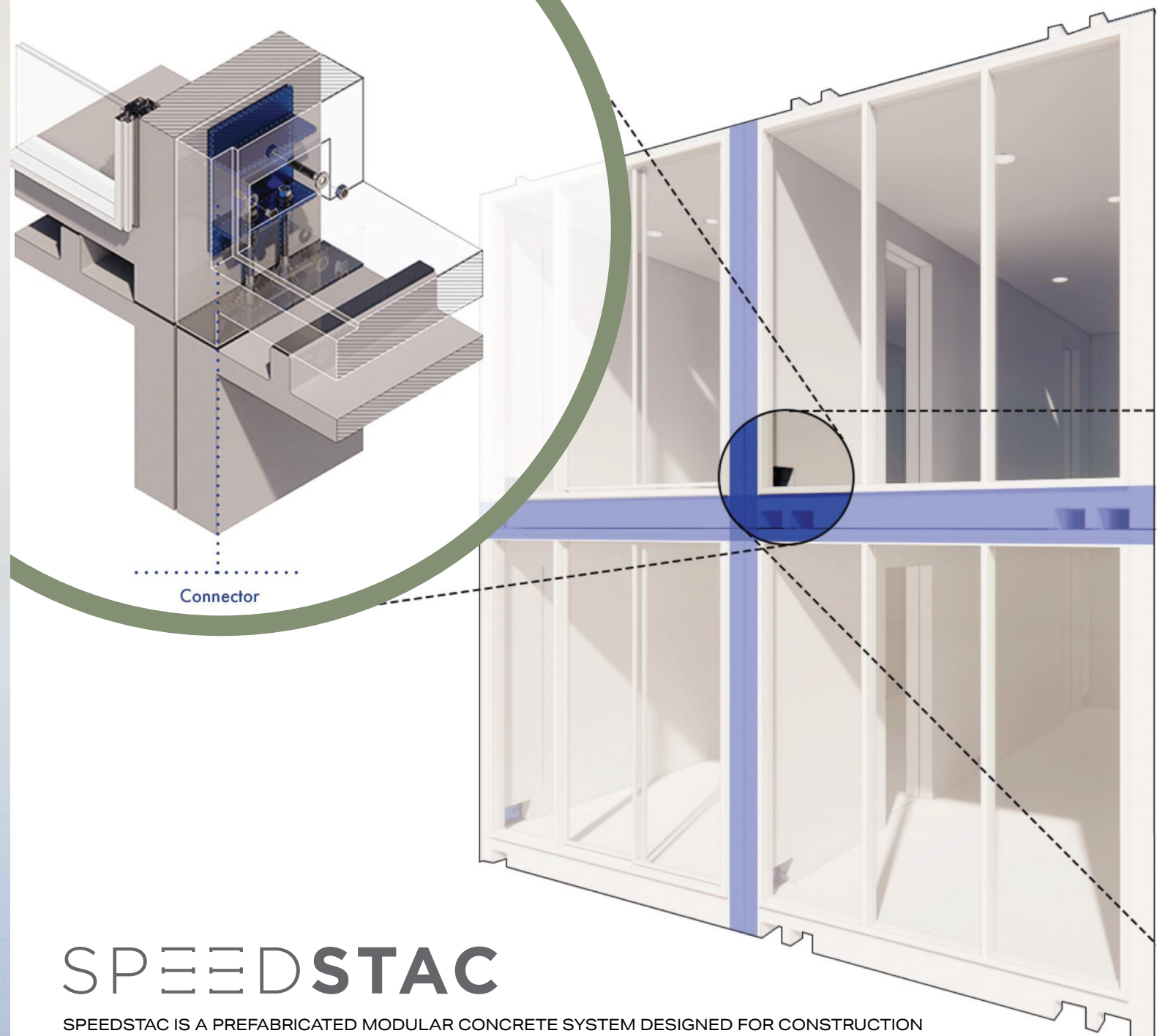


3.8 x 7.65 x 3.1 (h) m

(SIZE CAN VARY BASED ON PROJECT NEEDS)



THE FOLLOWING CONCEPTS WERE PREPARED BY A TEAM OF DESIGNERS FROM WZMH ARCHITECTS (CANADIAN AND UKRAINIAN) AND THE FOLLOWING ARCHITECTS LOCATED IN UKRAINE: ALEXANDER FIL, SERGII PLINOKOS, KOSTIANTIN BOLOBAN, ANASTASIIA PODUFALA



SPEEDSTAC

SPEEDSTAC IS A PREFABRICATED MODULAR CONCRETE SYSTEM DESIGNED FOR CONSTRUCTION PURPOSES, WHICH ALLOWS FOR STACKING AND SIDE-BY-SIDE CONNECTION TO CREATE BUILDINGS OF UP TO 30 STORIES IN HEIGHT. THE MODULES ARE TRANSPORTED TO THE SITE WITH A MAJORITY OF THE FINISHES AND EXTERIOR ENVELOPE COMPONENTS ALREADY PRE-INSTALLED

FIELD
HOSPITAL



MICRO COMMUNITY
CENTRE



SURFACE MEDICAL
CLINIC & EMERGENCY
SHELTER



MILITARY
BARRACKS



CENTER OF THE
STATE EMERGENCY
SERVICE

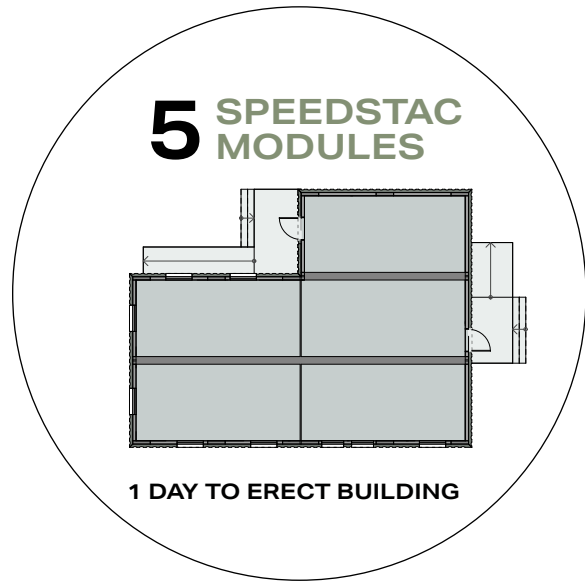


MICRO
COMMUNITY
CENTRE

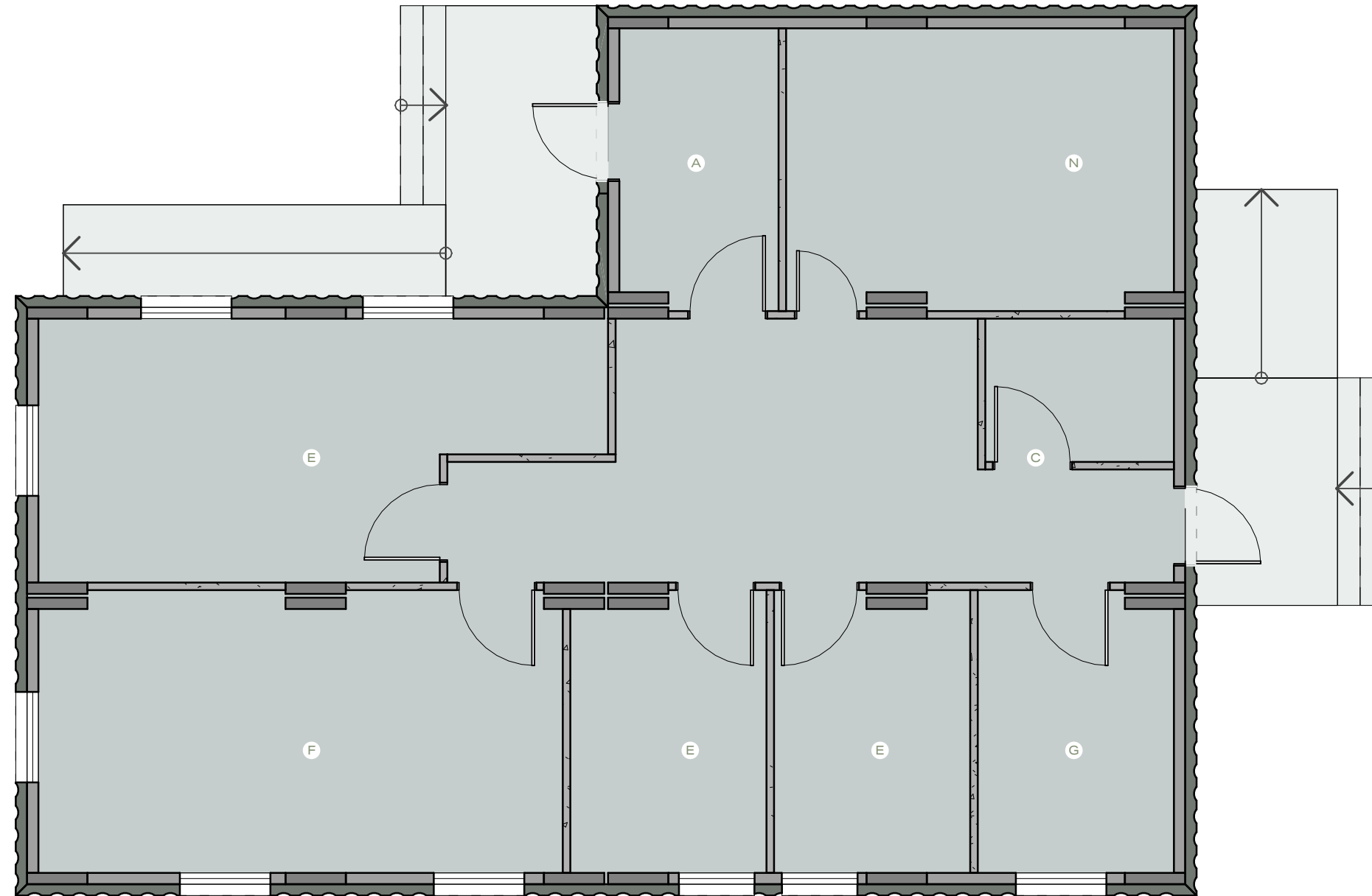
BASED ON DESIGN OF "COMMUNITY CENTRE" BY ALEXANDER FIL



MICRO COMMUNITY CENTRE



THE MICRO COMMUNITY CENTER IS A CUTTING-EDGE BUILDING CONSISTING OF 5 MODULES, DESIGNED FOR RAPID DEPLOYMENT IN ANY SETTLEMENT OR CITY WITHIN A SHORT SPAN OF 1 TO 3 DAYS. THIS COMPACT STRUCTURE OFFERS DEDICATED SPACES FOR EFFICIENT PATIENT EXAMINATION AND ESSENTIAL SUPPORT SERVICES. MOREOVER, THE ROOF OF THE CENTER PROVIDES AMPLE AREA FOR THE INSTALLATION OF SOLAR PANELS, ENABLING THE GENERATION OF ELECTRICITY OR HOT WATER AS A SUSTAINABLE ENERGY SOLUTION



10 PATIENTS

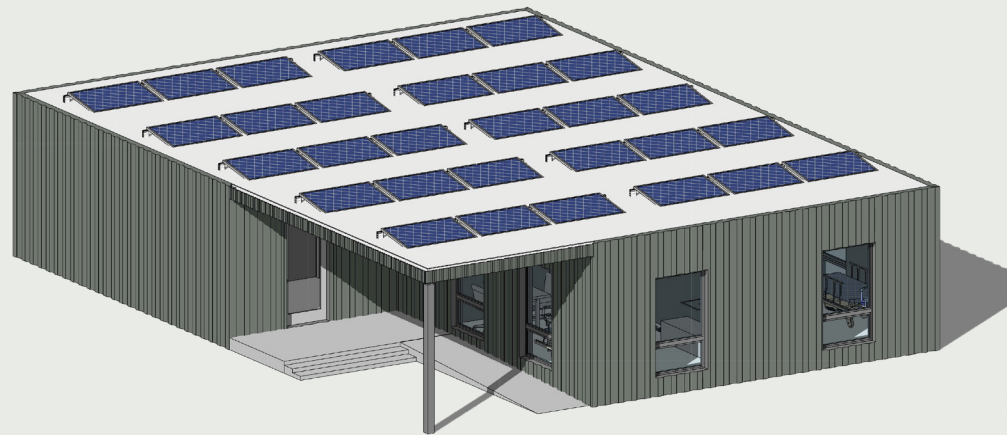
60 M²

- A Entrance
- C Barrier-Free Washroom
- E Examination
- F X-Ray Room
- G Radiology & Ultrasound Room
- N Storage Room



MICRO COMMUNITY CENTRE

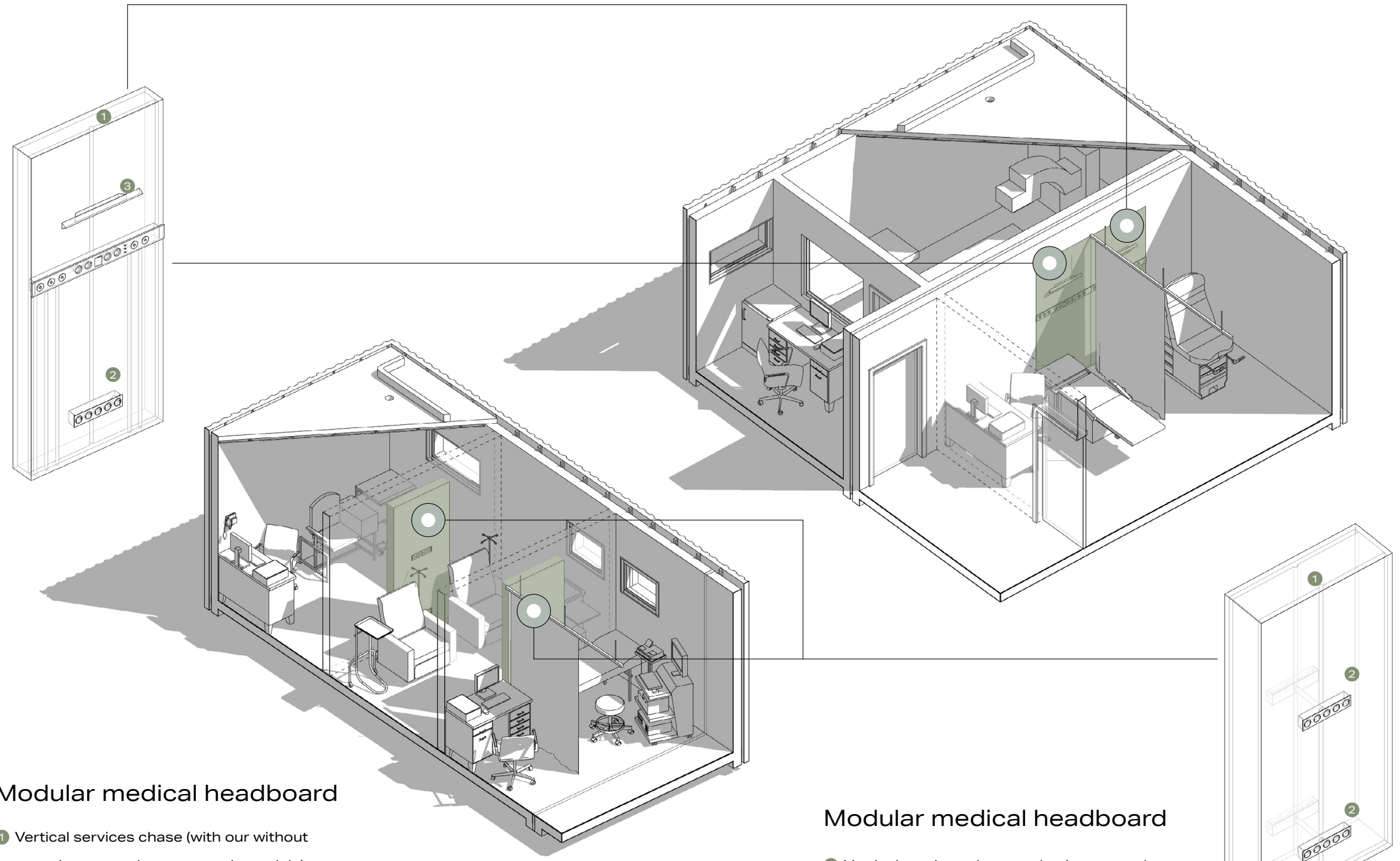
THIS TECHNICAL BUILDING COMPRISES MULTIPLE MEDICAL OBSERVATION ROOMS AND AN OPEN INTERIOR SPACE, WHICH IS STRATEGICALLY SURROUNDED BY ROOMS TO ENSURE SAFETY DURING BOMBARDMENTS. THE CENTER SERVES AS A VITAL CONTRIBUTION TO IMPROVING THE QUALITY OF LIFE FOR RESIDENTS IN A SMALL TOWN, OFFERING EASY ACCESS TO ESSENTIAL MEDICAL SERVICES AND PROMPT FIRST AID ASSISTANCE





DALL-E. COLOURED
PENCIL RENDERING
OF AN DOCTORS
EXAMINATION ROOM

THE SPEEDSTAC MODULES OFFER AN IDEAL
SIZE, ENABLING A DIVERSE RANGE OF
FIXTURES, FURNISHINGS, AND EQUIPMENT,
WITH THE ADDED OPTION TO RECESS
ITEMS BETWEEN STRUCTURAL COLUMNS/
PILASTERS



Modular medical headboard

- 1 Vertical services chase (with our without an uninterrupted power supply module)
- 2 Electrical / Data / Gas Outlets
- 3 Light

Modular medical headboard

- 1 Vertical services chase and uninterrupted power supply module
- 2 Electrical / Data / Gas Outlets

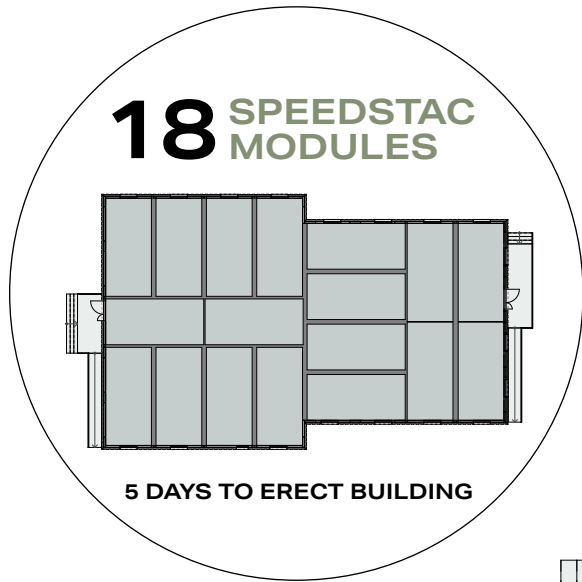




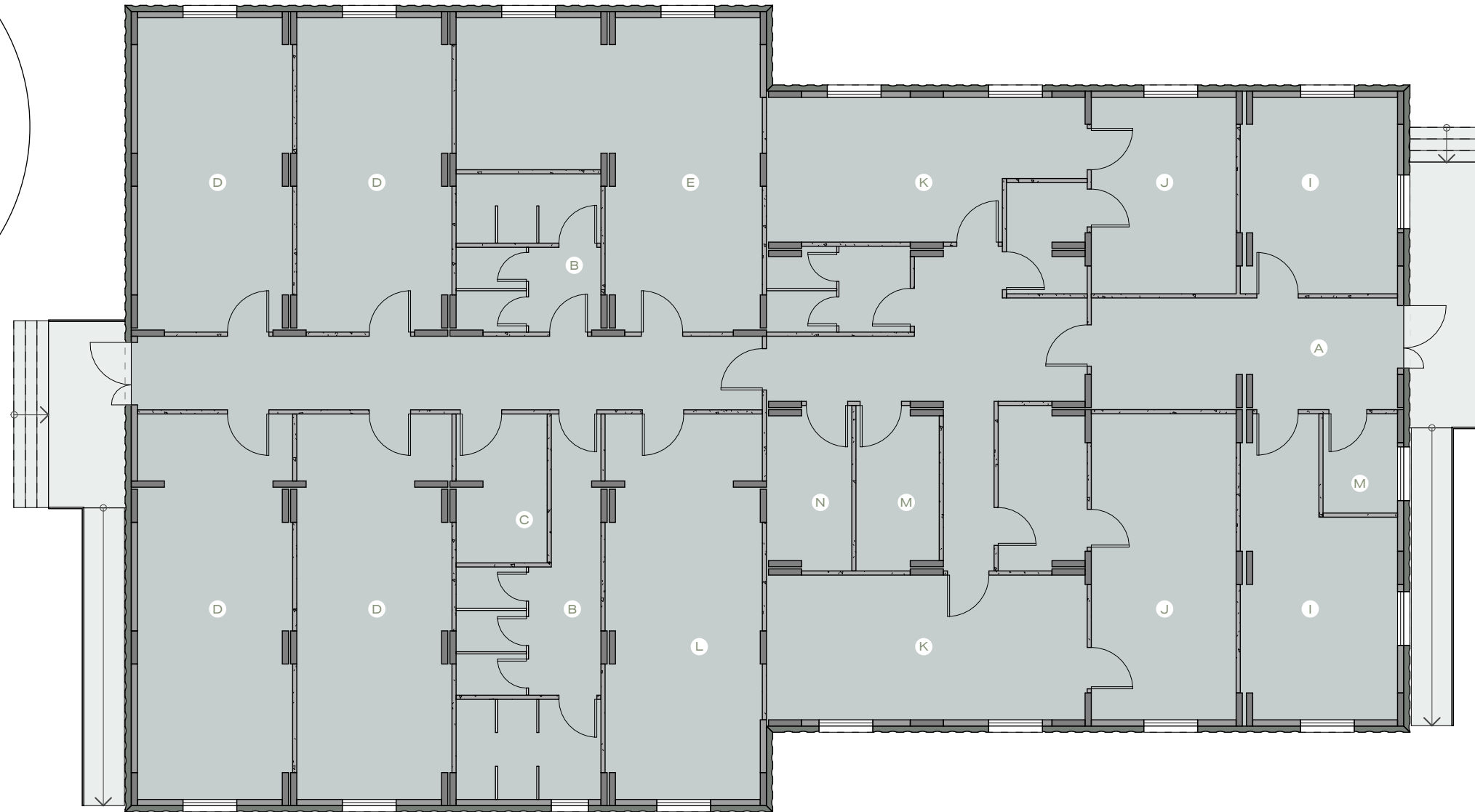
ГРОМАДСЬКИЙ
ЦЕНТР

FIELD
HOSPITAL





WITHIN THE PRE-COMBAT ZONE, AN INNOVATIVE MODULAR HOSPITAL FEATURING AN UNDERGROUND SECTION HAS BEEN DEVELOPED TO ENSURE ROBUST PROTECTION AGAINST BOMBARDMENTS. THE UNDERGROUND SEGMENT OF THE HOSPITAL IS REINFORCED AND THOUGHTFULLY POSITIONED, OFFERING SEAMLESS ACCESS FOR AMBULANCES TO TRANSPORT THE WOUNDED DIRECTLY TO TRIAGE ROOMS THROUGH A CLEAR PATHWAY



18 PATIENTS

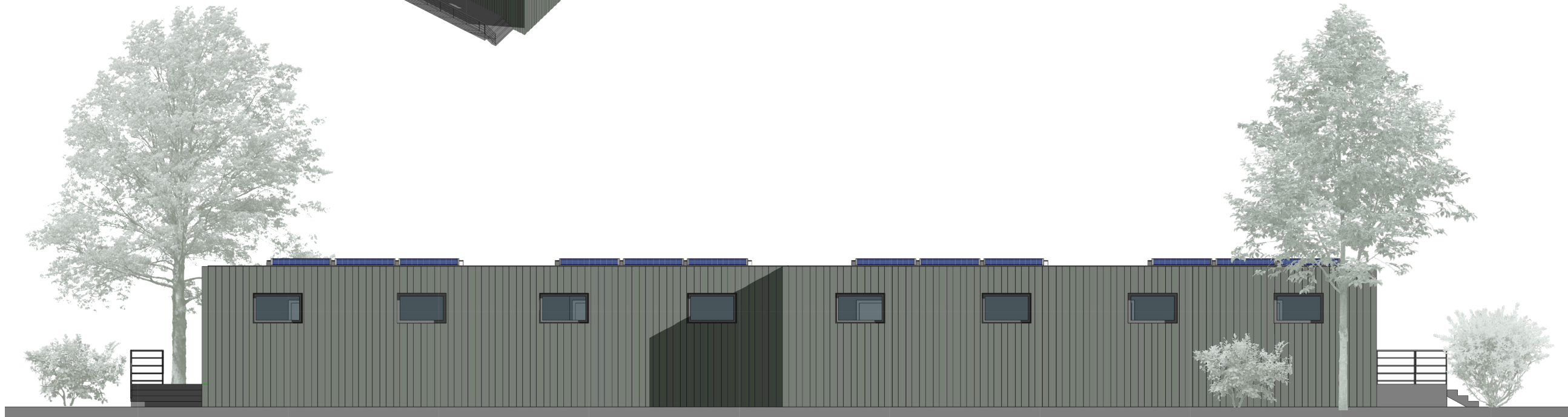
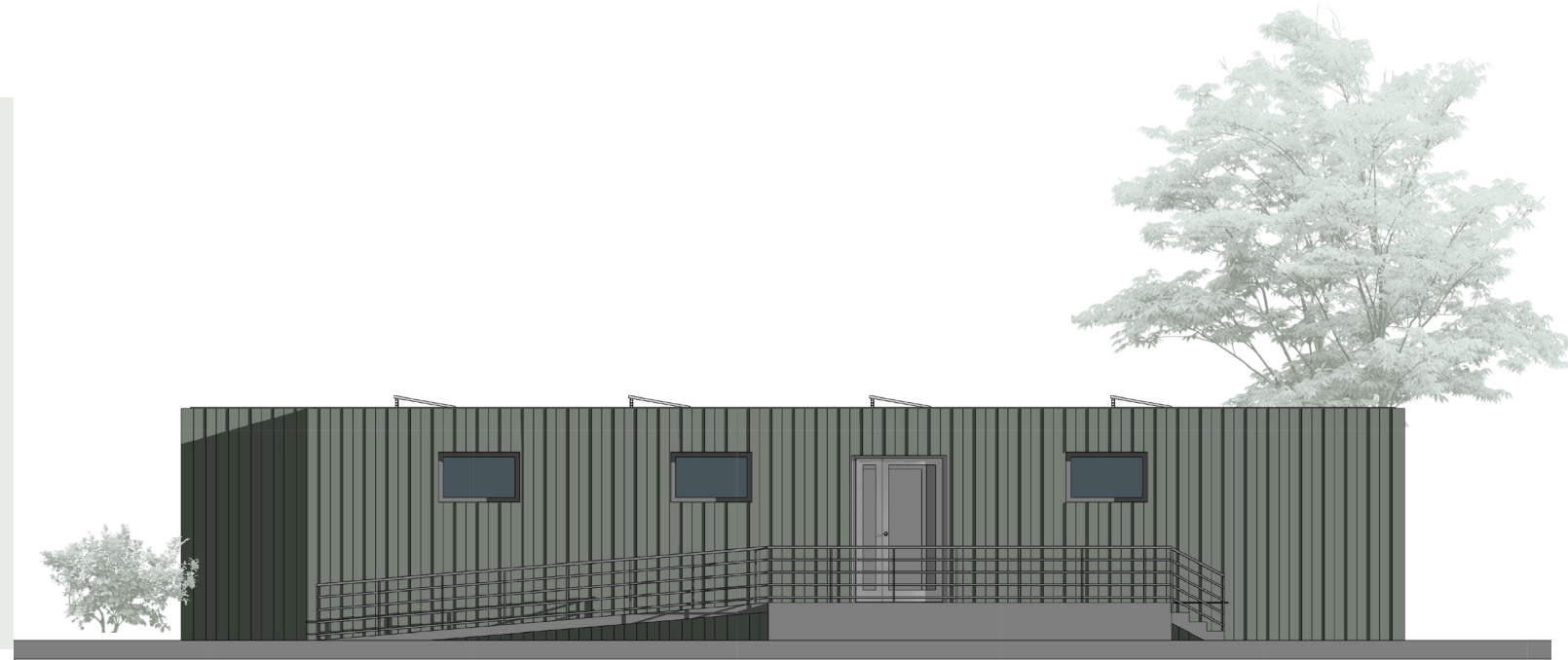
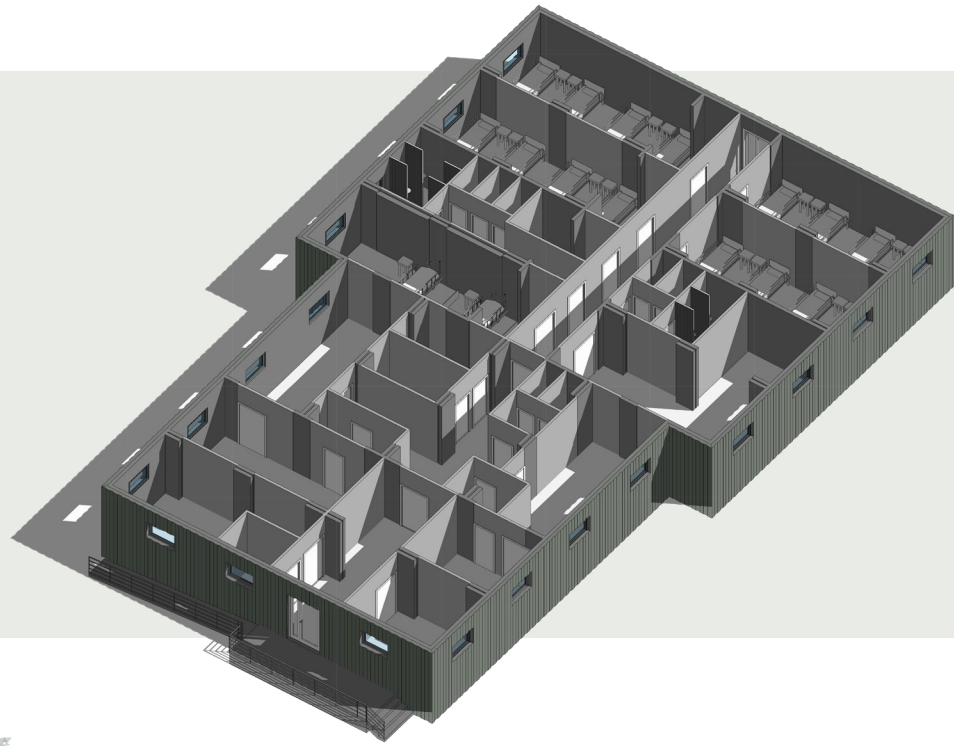
513 M²

- A Entrance
- B Washroom
- C Barrier-Free Washroom
- D Patient Area
- E Examination Room
- I Triage Area
- J Operating Room
- K Post-Anesthesia Care Unit Room
- L Resuscitation Room
- M Staff Area
- N Storage Room



FIELD HOSPITAL

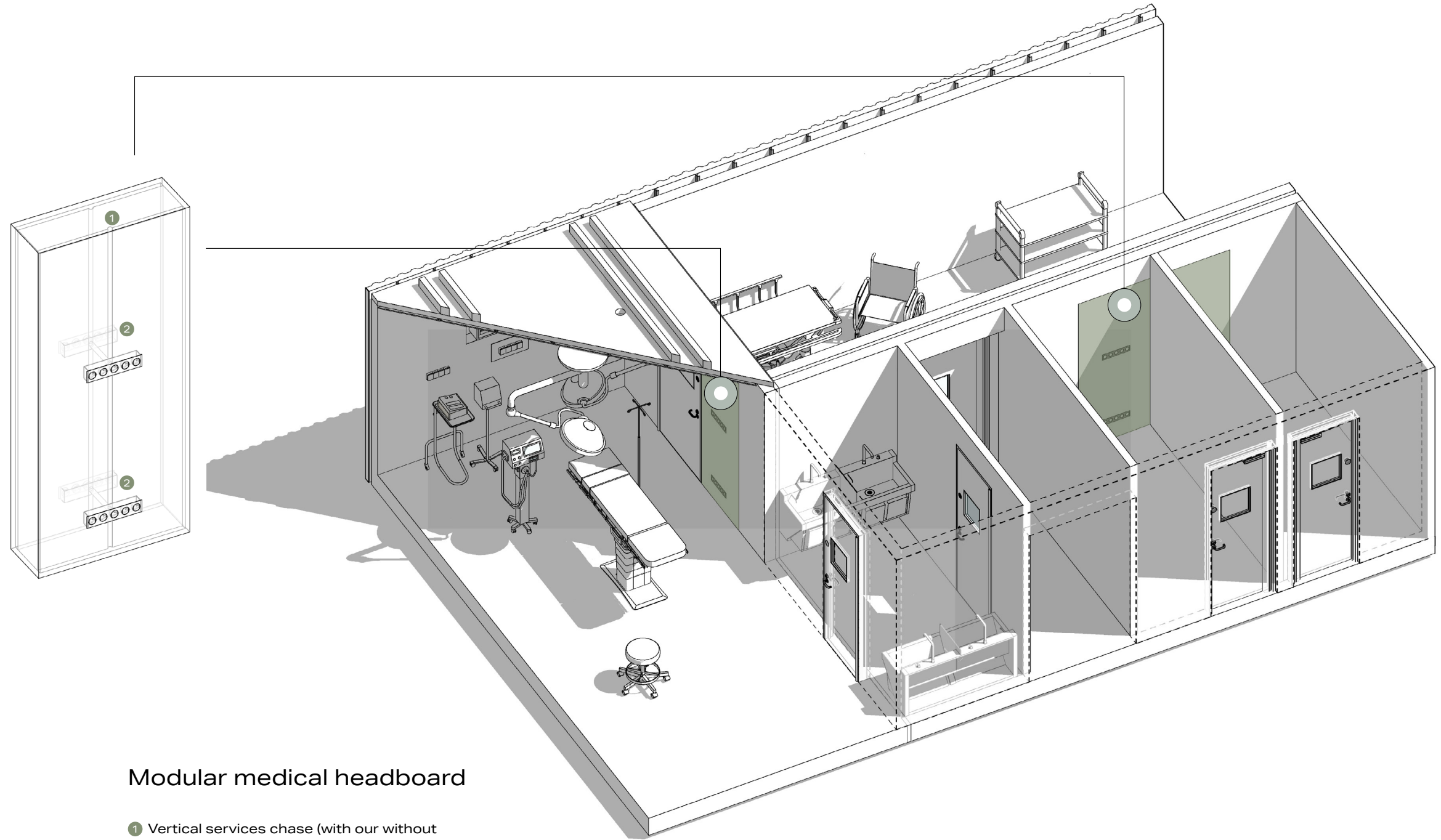
THE SPEEDSTAC MODULES PROVIDE A CONVENIENT SPACE FOR INTEGRATING PREFABRICATED/MODULAR HOSPITAL HEADBOARDS, CATERING TO ELECTRICAL, DATA, AND GAS REQUIREMENTS. THIS FEATURE ENABLES RAPID CONSTRUCTION OF THE BUILDING, FOLLOWED BY SEAMLESS 'PLUG-IN' INSTALLATION OF THE HEADBOARDS





DALL-E OIL RENDERING OF WOUNDED SOLDIERS BEING DELIVERED TO A FIELD HOSPITAL

MULTIPLE OPENINGS WITHIN THE SPEEDSTAC WALL PANELS ALLOW FOR SEAMLESS PATHWAYS AND CORRIDORS, PROVIDING EASY NAVIGATION WITH MEDICAL STRETCHERS/GURNEYS



Modular medical headboard

- 1 Vertical services chase (with our without an uninterrupted power supply module)
- 2 Electrical / Data / Gas Outlets





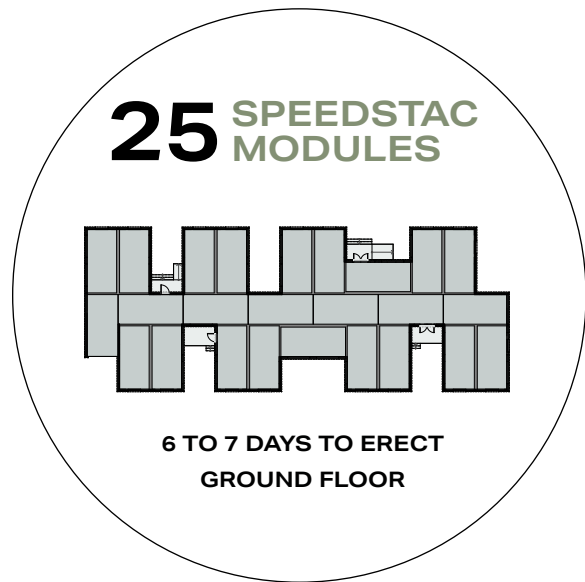


SURFACE MEDICAL CLINIC & EMERGENCY SHELTER

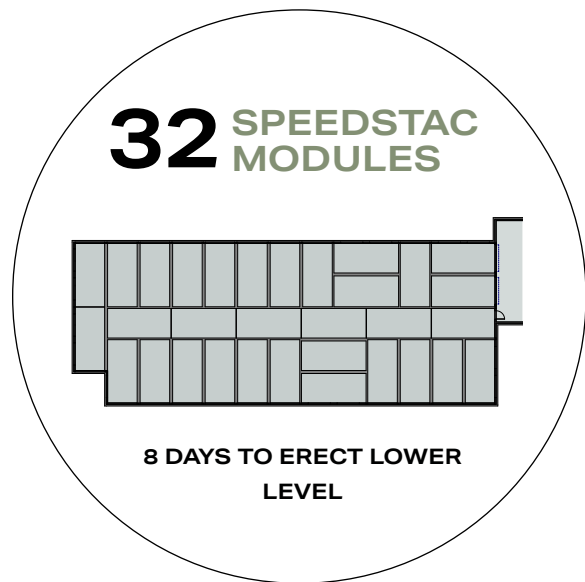
BASED ON DESIGN OF "SURFACE MEDICAL CLINIC" BY ALEXANDER FIL



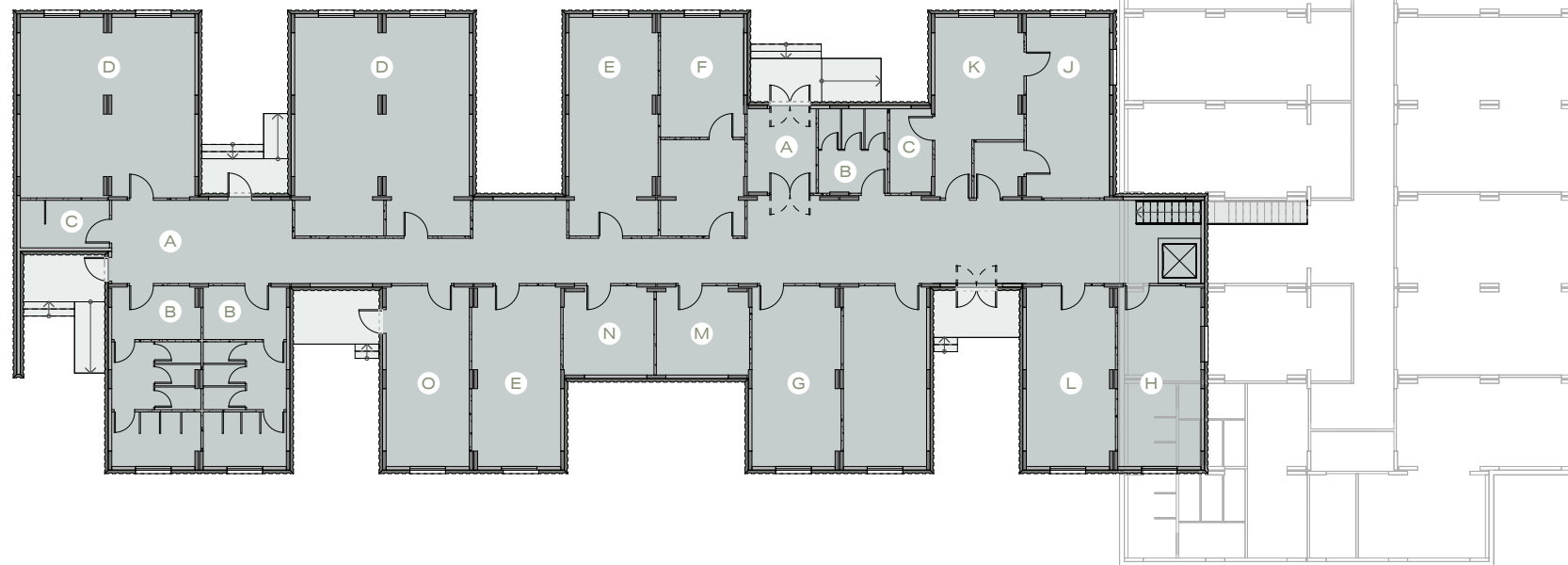
SURFACE MEDICAL CLINIC & EMERGENCY SHELTER



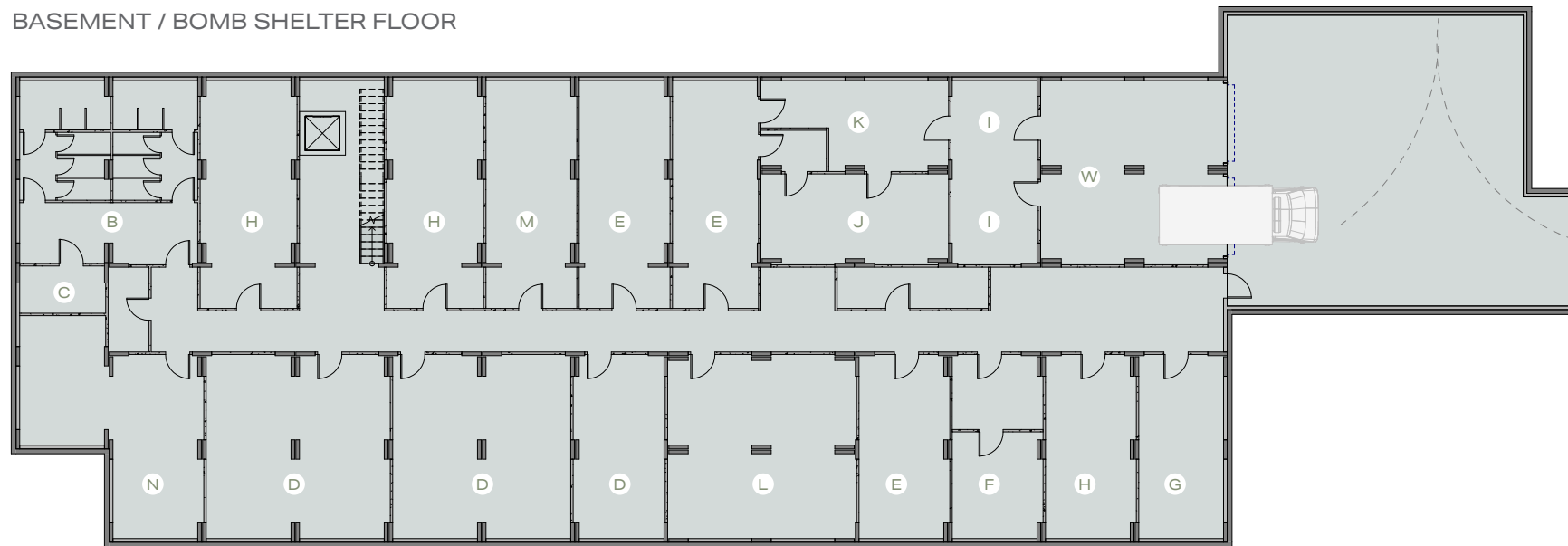
TOTAL OF 14 TO 15 DAYS TO ERECT COMPLETE BUILDING



GROUND FLOOR



BASEMENT / BOMB SHELTER FLOOR



50 PATIENTS

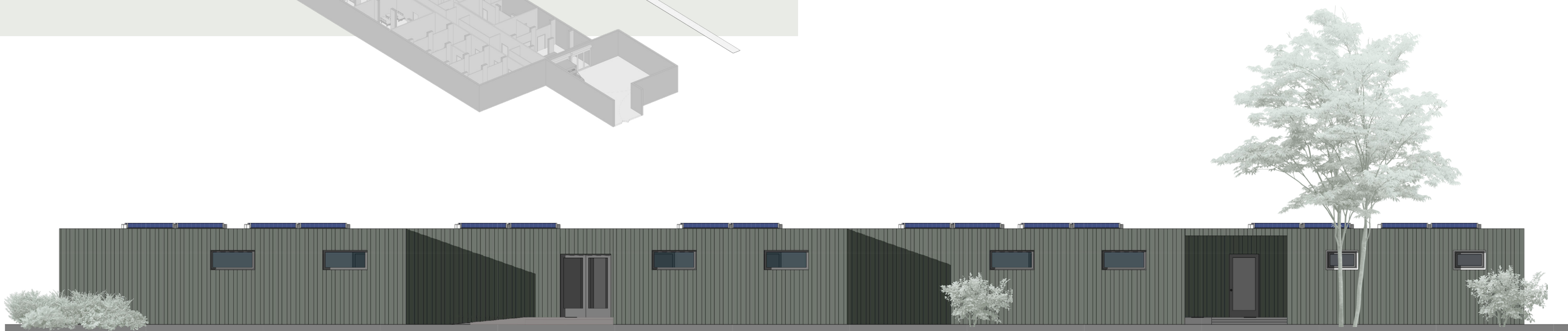
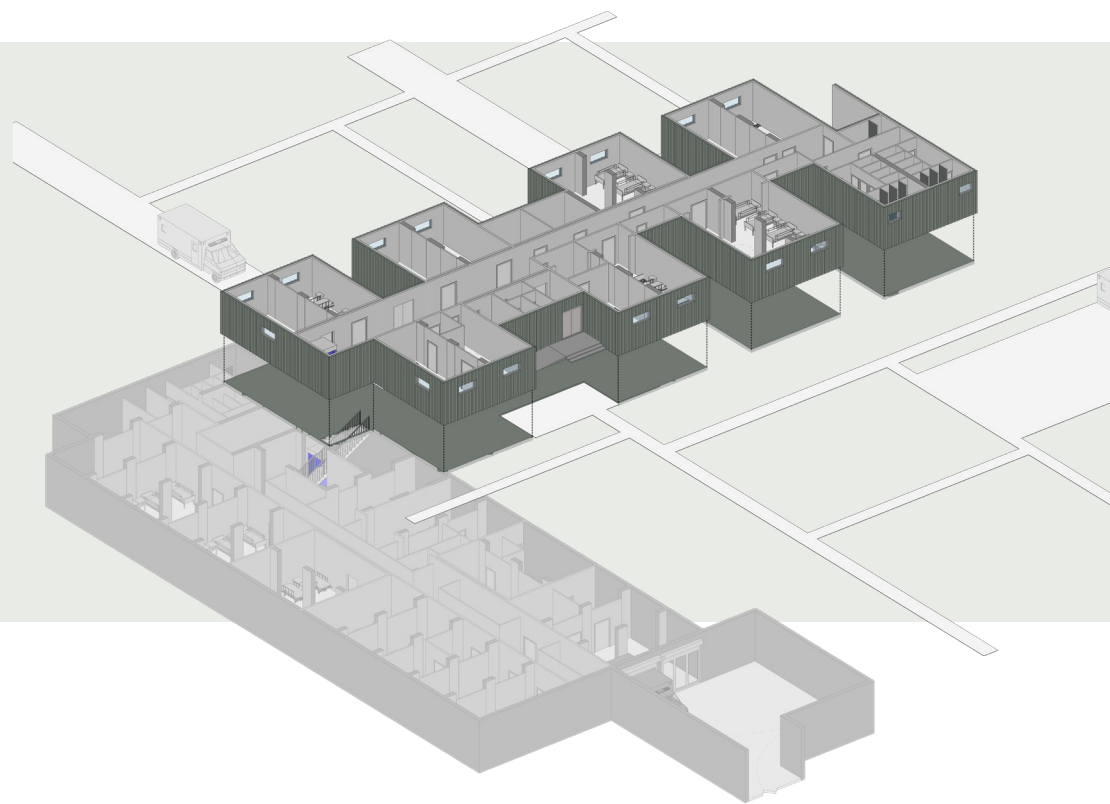
1 570 M²

- A Entrance
- B Washroom
- C Barrier-Free Washroom
- D Patient Area
- E Examination
- F X-Ray Room
- G Radiology & Ultrasound Room
- H Laboratory
- I Triage Area
- J Operating Room
- K Post-Anesthesia Care Unit Room
- L Resuscitation Room
- M Staff Area
- N Storage Room
- O Kitchen Area
- W Garage



SURFACE MEDICAL CLINIC & EMERGENCY SHELTER

THIS EXTENSIVE MEDICAL COMPLEX CONSISTS OF 57 SPEESTAC MODULES, DESIGNED WITH A HEIGHT OF 2 STOREYS, OPTIMIZING THE ADVANTAGES OF THIS PRE-FABRICATED BUILDING BLOCK

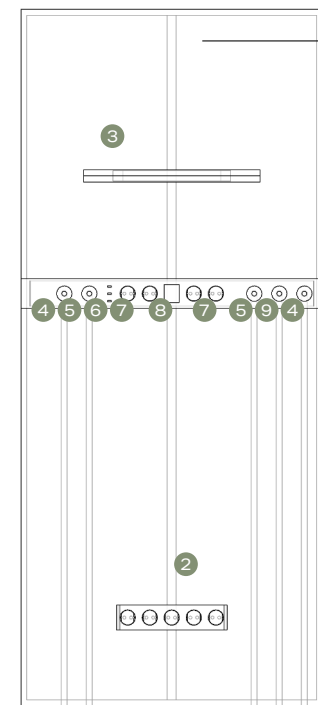


SURFACE MEDICAL CLINIC & EMERGENCY SHELTER



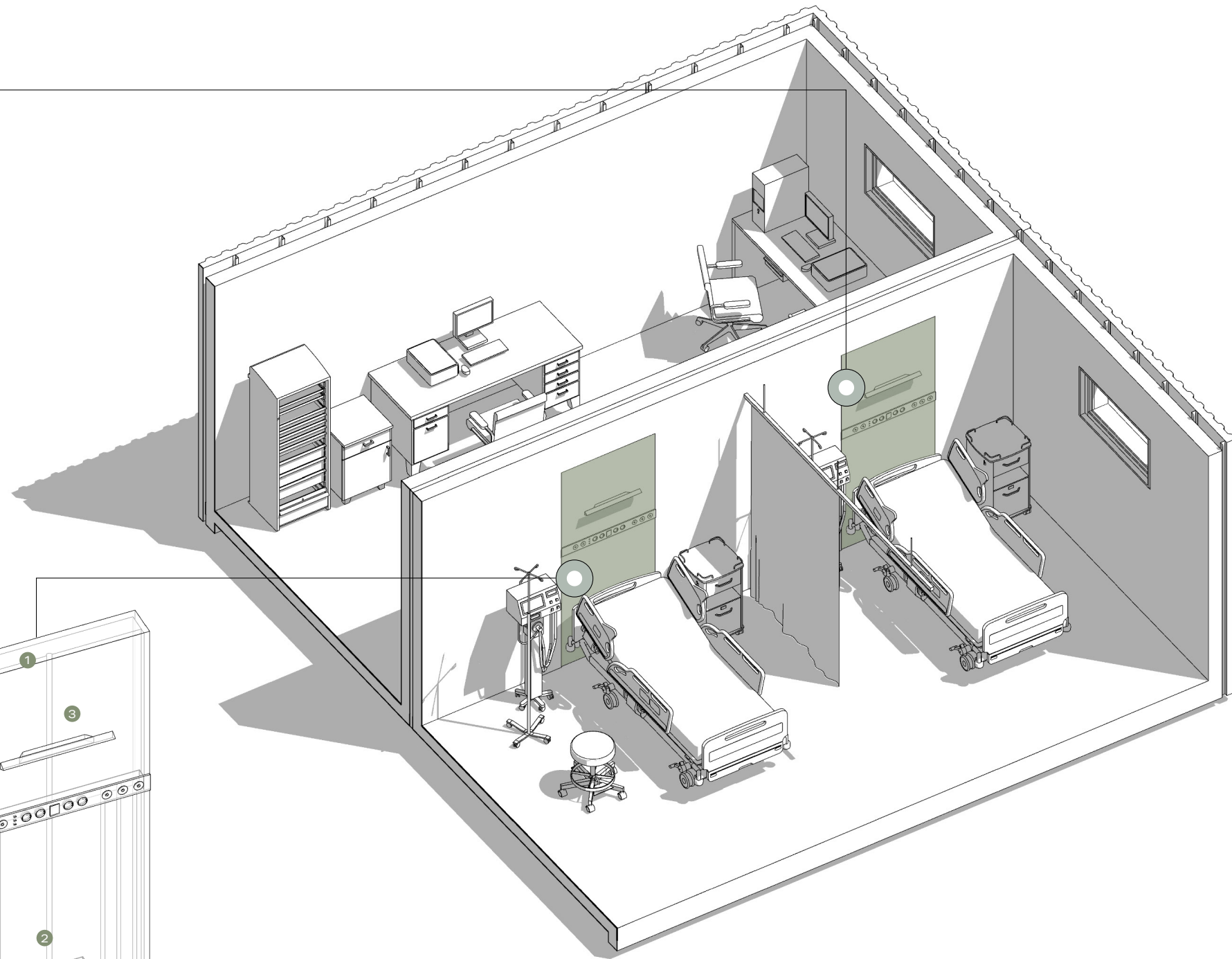
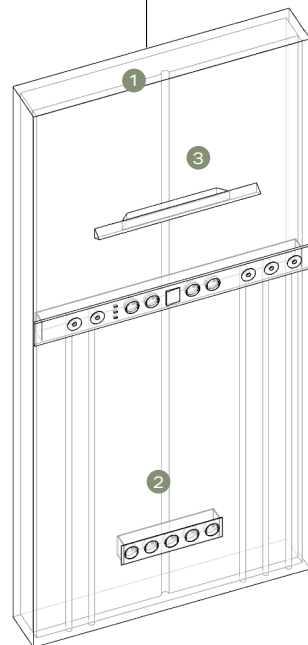
DALL-E.
SKETCH
RENDERING OF
A COURTYARD

CONFIGURE CAPTIVATING EXTERIOR
COURTYARD SPACES WITH THE SPEEDSTAC
MODULES, SHELTERED ON THREE SIDES,
ENSURING A SECURE ENVIRONMENT AND
GRANTING PATIENTS ACCESS TO THE
REFRESHING OUTDOORS



Modular medical headboard

- 1 Vertical services chase
(with or without an uninterrupted power supply module)
- 2 Electrical / Data Outlets
- 3 Light
- 4 Oxygen Outlet
- 5 Vacuum Outlet
- 6 USB Outlet
- 7 Electrical Outlets
- 8 Switches
- 9 Compressed Air Outlet



SURFACE MEDICAL CLINIC & EMERGENCY SHELTER



SURFACE MEDICAL CLINIC & EMERGENCY SHELTER





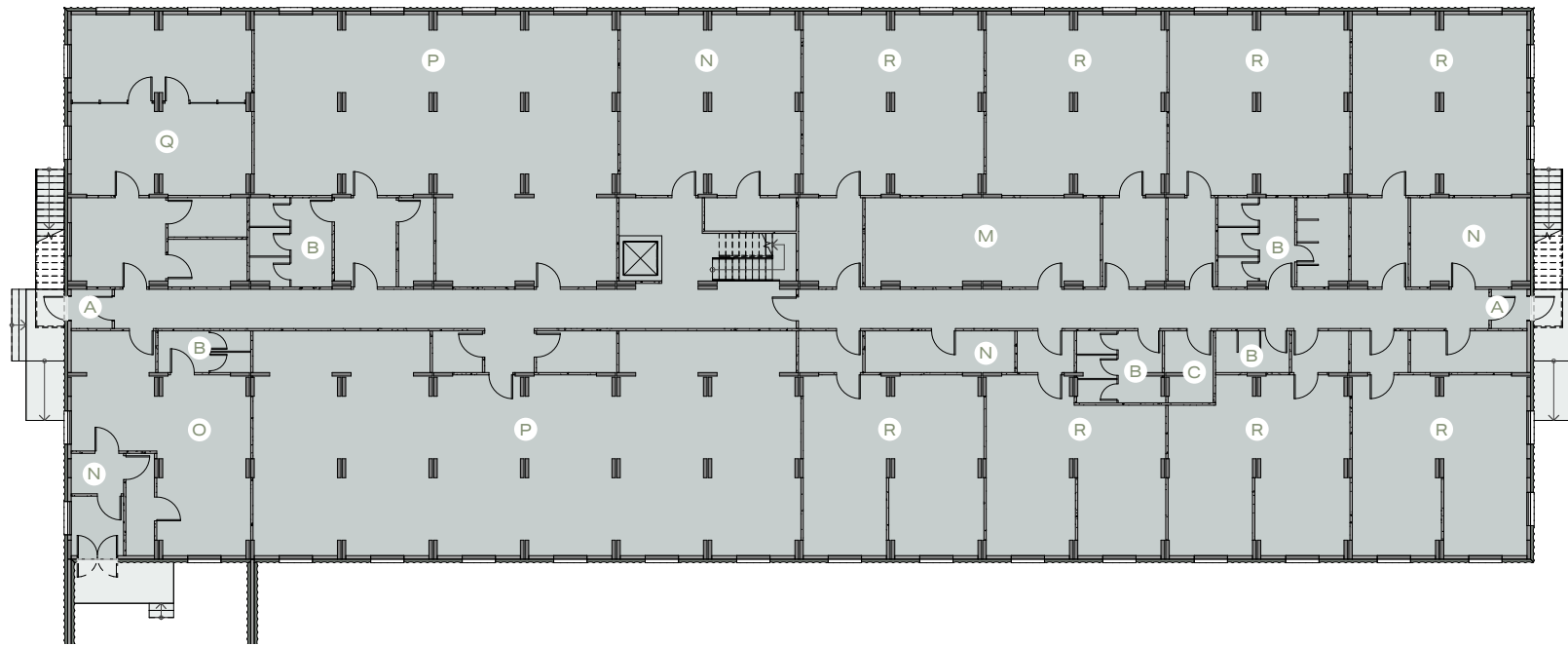
MILITARY BARRACKS

BASED ON DESIGN OF "MILITARY BARRACKS"
BY SERGII PLINOKOS & KOSTIANTIN BOLOBAN

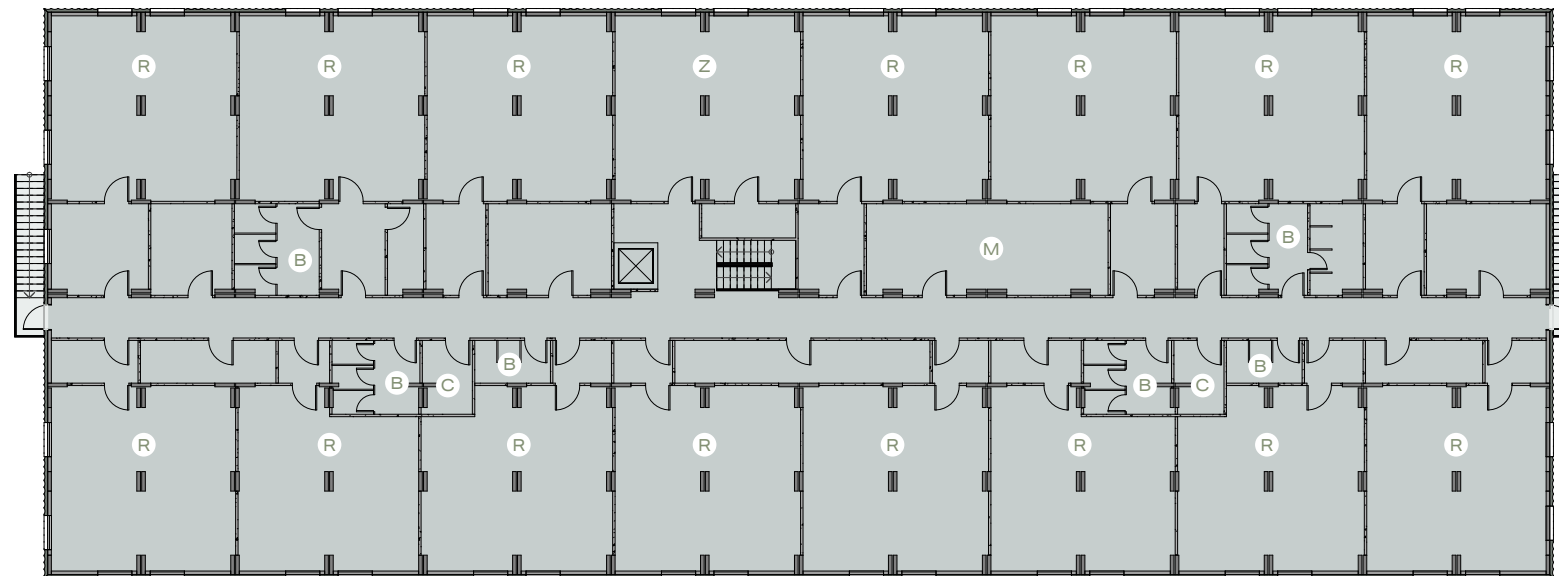


MILITARY BARRACKS

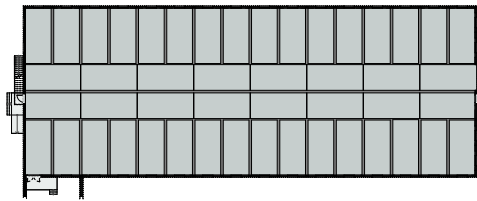
GROUND FLOOR



SECOND FLOOR



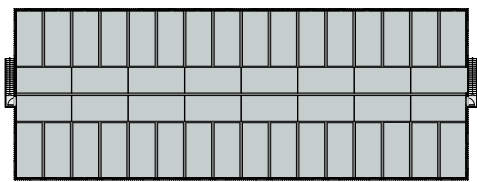
48 SPEEDSTAC
MODULES



12 DAYS TO ERECT
GROUND FLOOR

TOTAL OF 24 DAYS TO ERECT
COMPLETE BUILDING

48 SPEEDSTAC
MODULES



12 DAYS TO ERECT
SECOND FLOOR

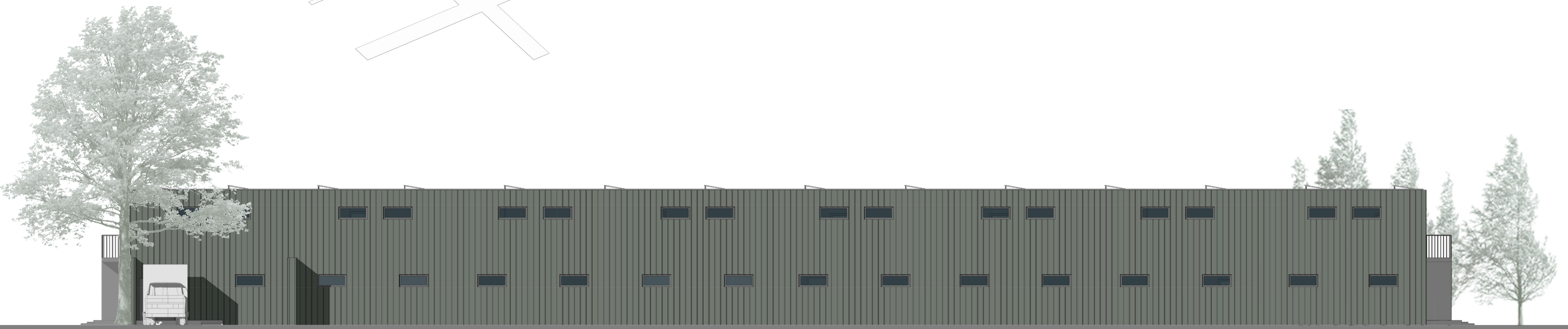
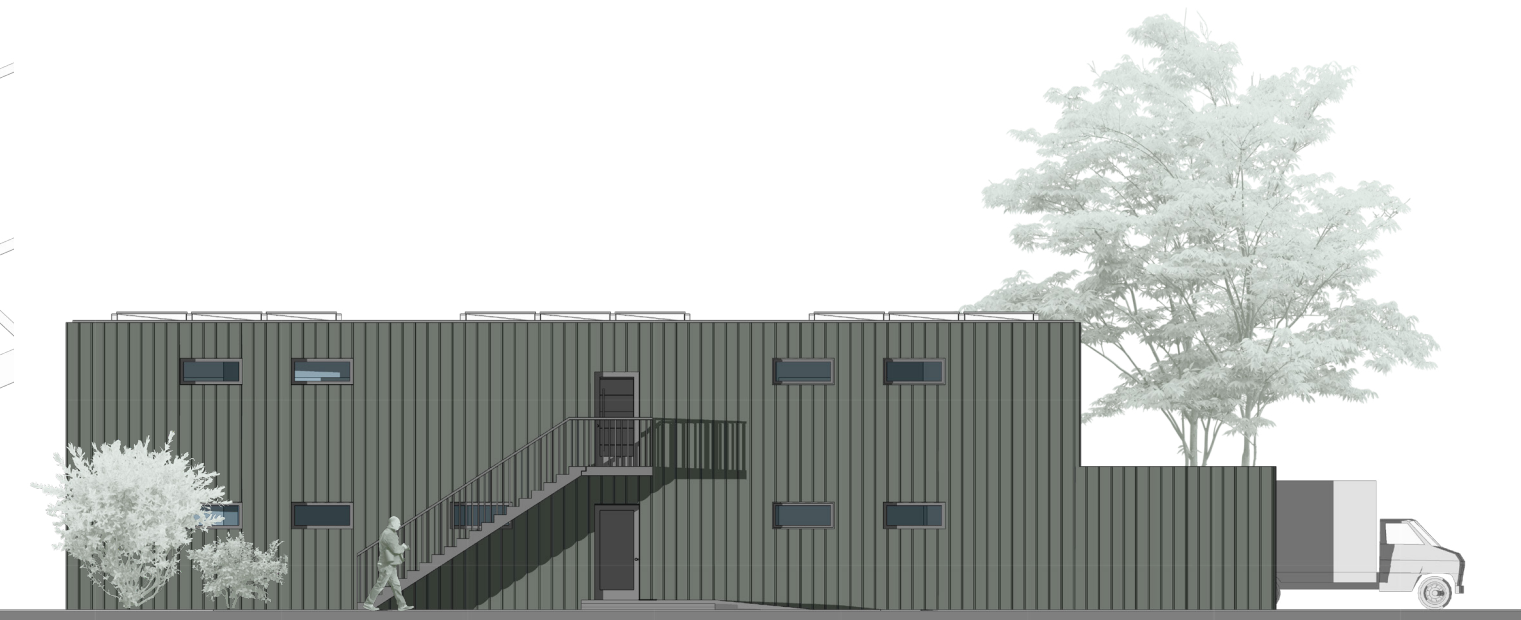
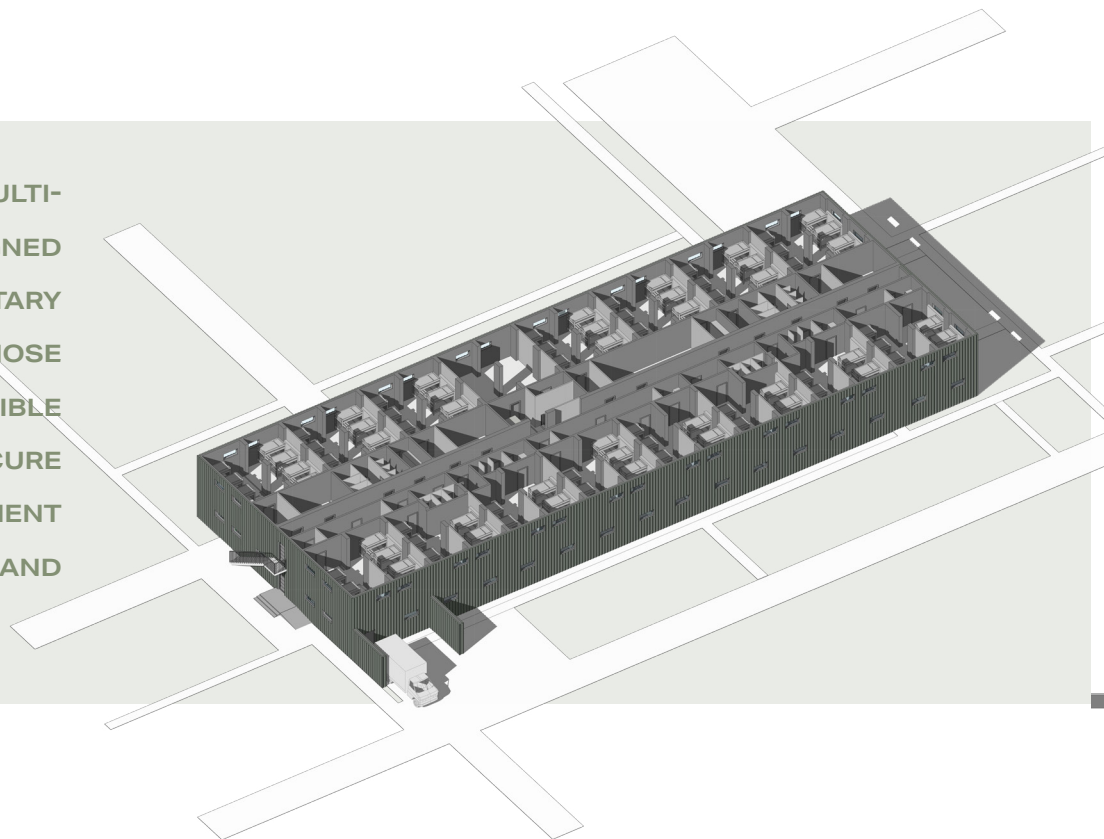
160 PATIENTS

2 746 M²

- A Entrance
- B Washroom / Bathroom
- C Barrier-Free Washroom
- M Staff Area
- N Storage Room
- O Kitchen Area
- P Common area
- Q Office
- R Sleeping Quarter
- Z Gym

MILITARY BARRACKS

BARRACKS SERVE AS MULTI-PURPOSE FACILITIES DESIGNED TO ACCOMMODATE MILITARY PERSONNEL, INCLUDING THOSE NECESSITATING ACCESSIBLE SPACES. THEY PROVIDE A SECURE AND COMFORTABLE ENVIRONMENT FOR LIVING, TRAINING, AND OVERALL WELL-BEING

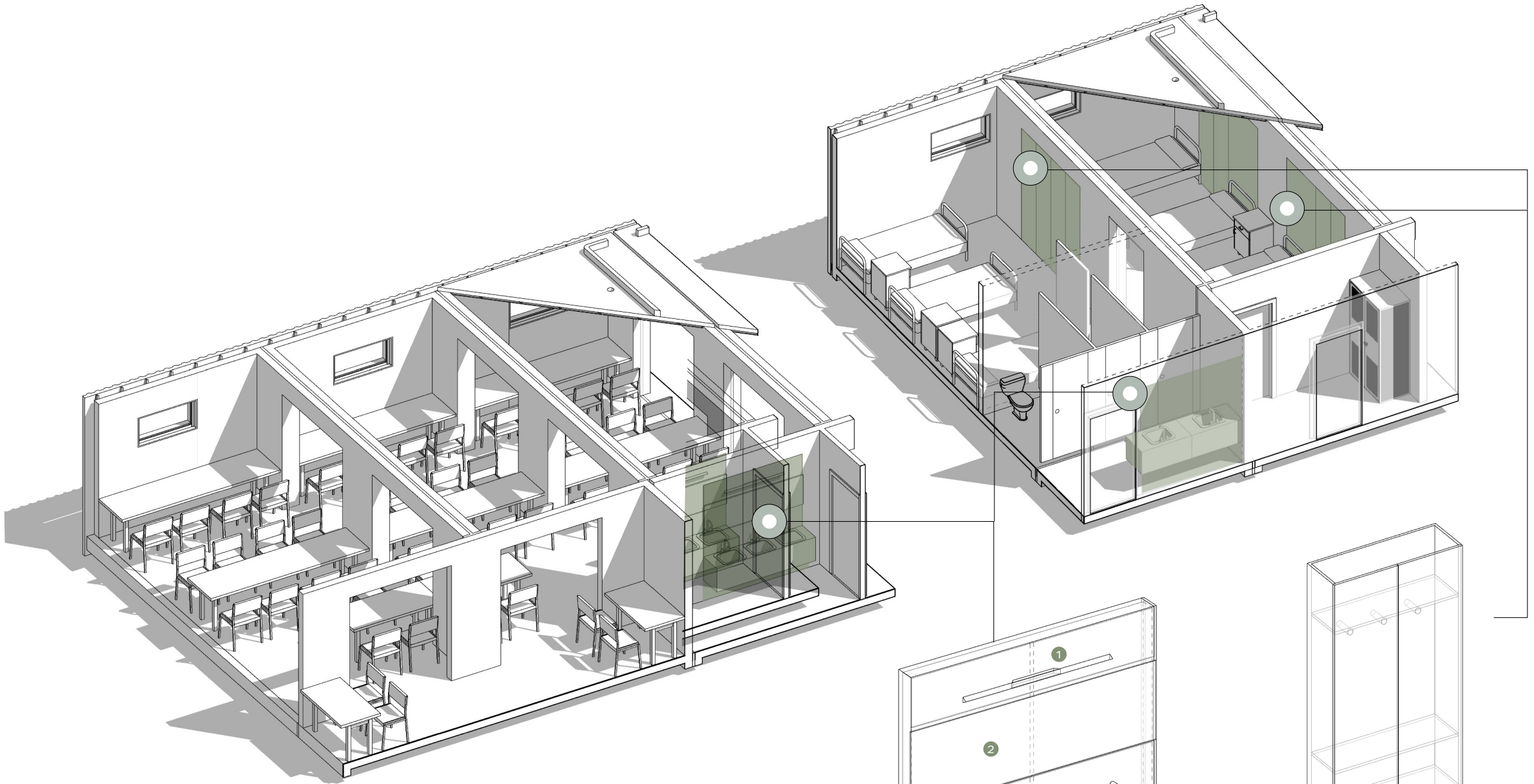


MILITARY BARRACKS



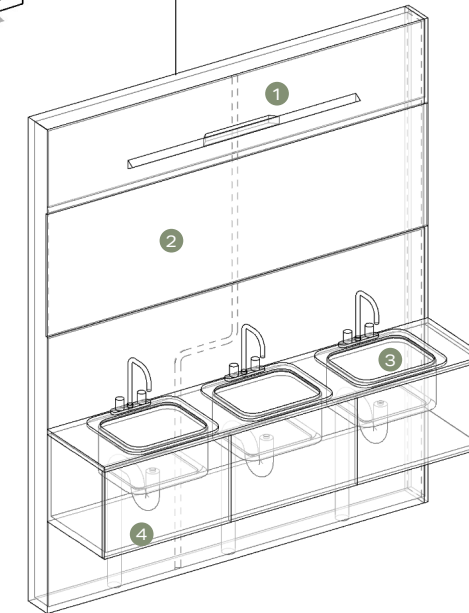
DALL-E.
OIL RENDERING OF
SOLDIERS EATING

BY STACKING SPEEDSTAC MODULES, THE POTENTIAL FOR CONSTRUCTING VERSATILE BUILDINGS WITH MULTIPLE COMPLEMENTARY USES IS UNLOCKED. WITH CONCRETE AS THE PRIMARY MATERIAL, THESE STRUCTURES ARE PURPOSEFULLY DESIGNED AND CONSTRUCTED TO WITHSTAND POST-DISASTER EVENTS WITH RESILIENCE AND STRENGTH



Modular plumbing block

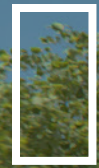
- 1 Light
- 2 Mirror
- 3 Sink
- 4 Vanity



Modular lockers







CENTER OF THE STATE EMERGENCY SERVICE

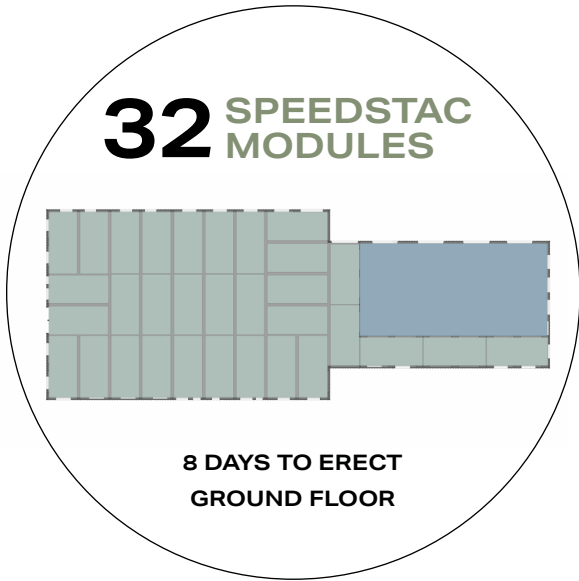
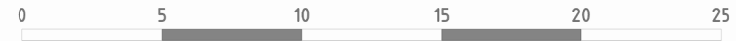
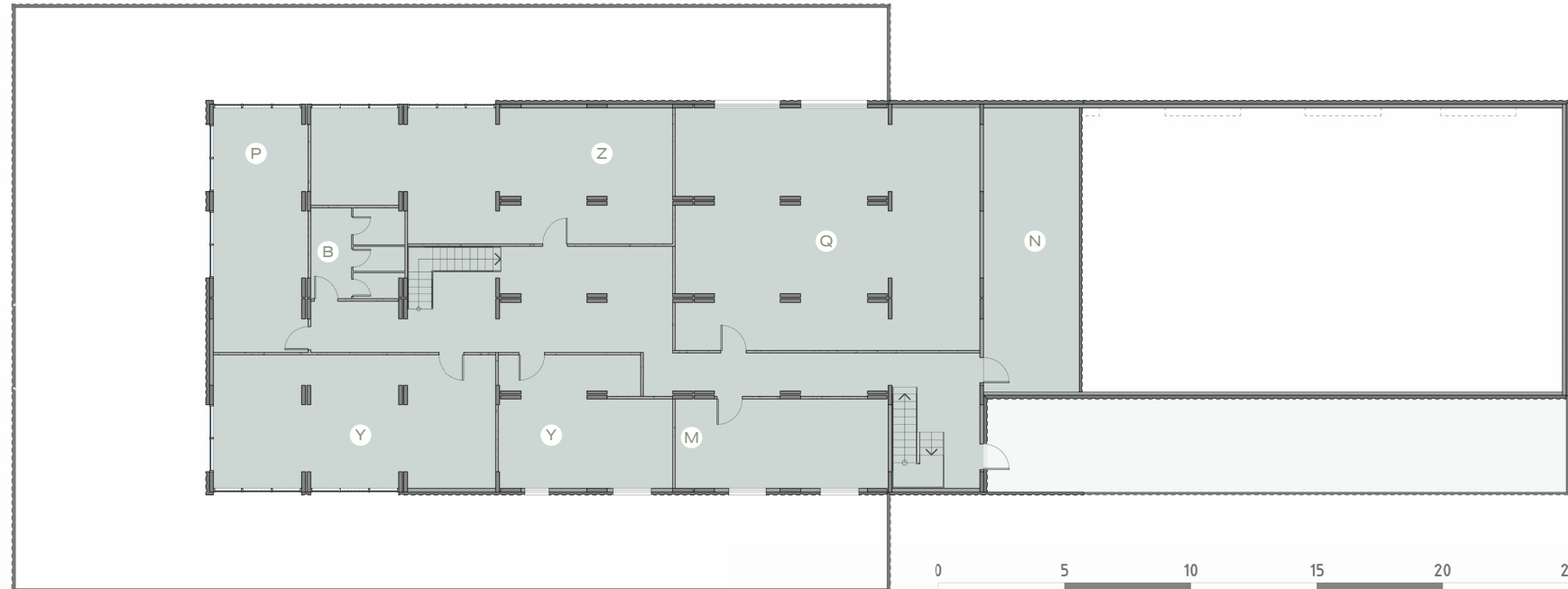
BASED ON DESIGN OF "RESCUE CENTER" BY ANASTASIIA PODUFALA



GROUND FLOOR



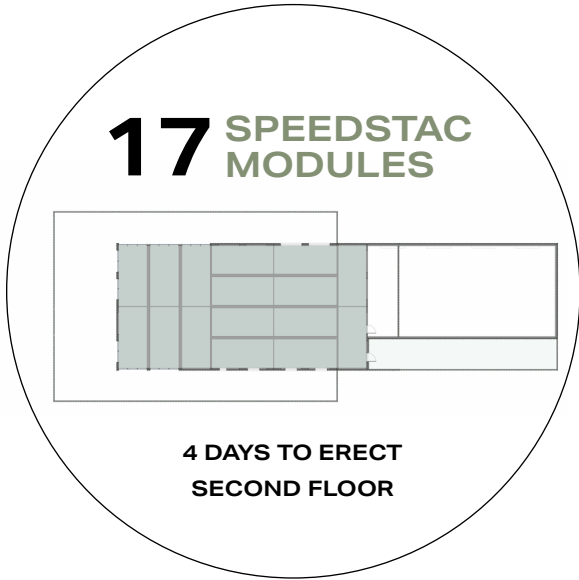
SECOND FLOOR



32 SPEEDSTAC
MODULES

**8 DAYS TO ERECT
GROUND FLOOR**

**TOTAL OF 12 DAYS TO ERECT
COMPLETE BUILDING**



17 SPEEDSTAC
MODULES

**4 DAYS TO ERECT
SECOND FLOOR**

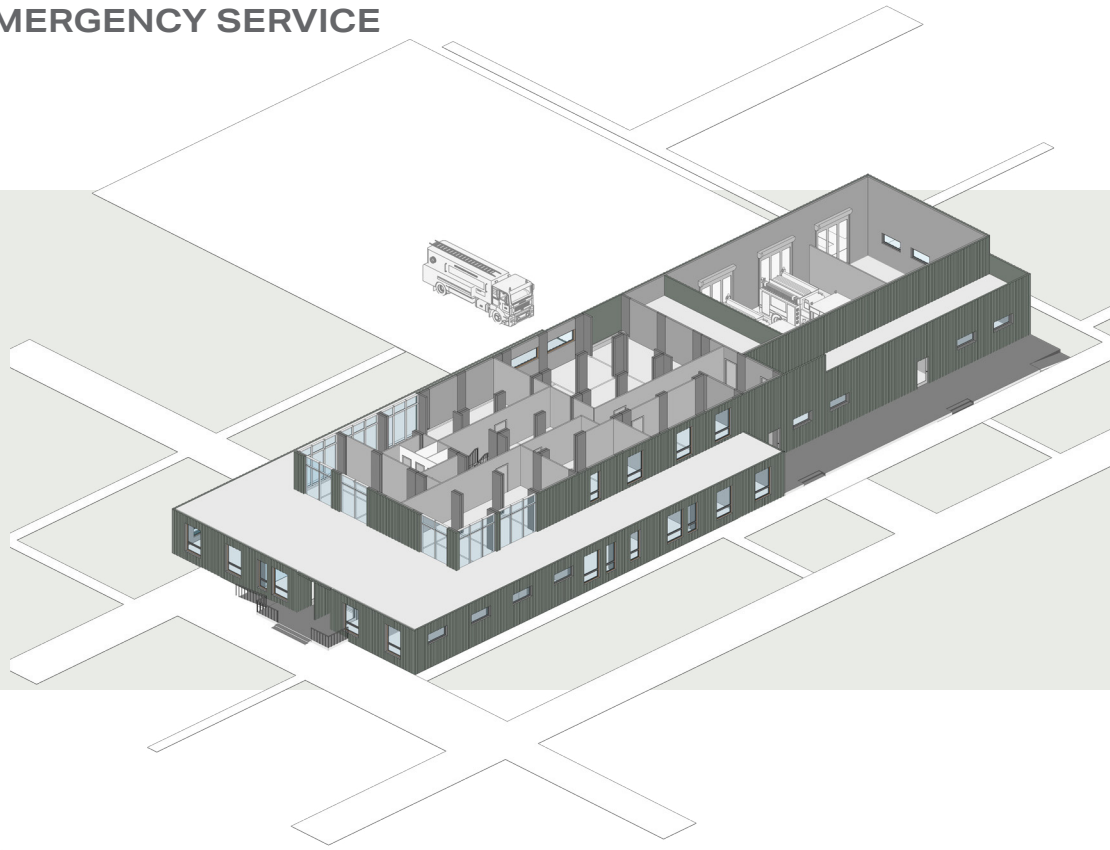
100 PATIENTS

1 620 M²

- A Entrance
- B Washroom
- C Barrier-Free Washroom
- D Patient Area
- E Examination Room
- F X-Ray Room
- G Radiology & Ultrasound Room
- H Laboratory
- I Triage Area
- J Operating Room
- K Post-Anesthesia Care Unit Room
- L Resuscitation Room
- M Staff Area
- N Storage Room
- P Common area
- Q Office
- S Duty Officer Room
- T Equipment Room
- U Interview Room
- V Holding Cells
- W Garage
- X Janitor Room
- Y Conference Hall
- Z Gym

CENTER OF THE STATE EMERGENCY SERVICE

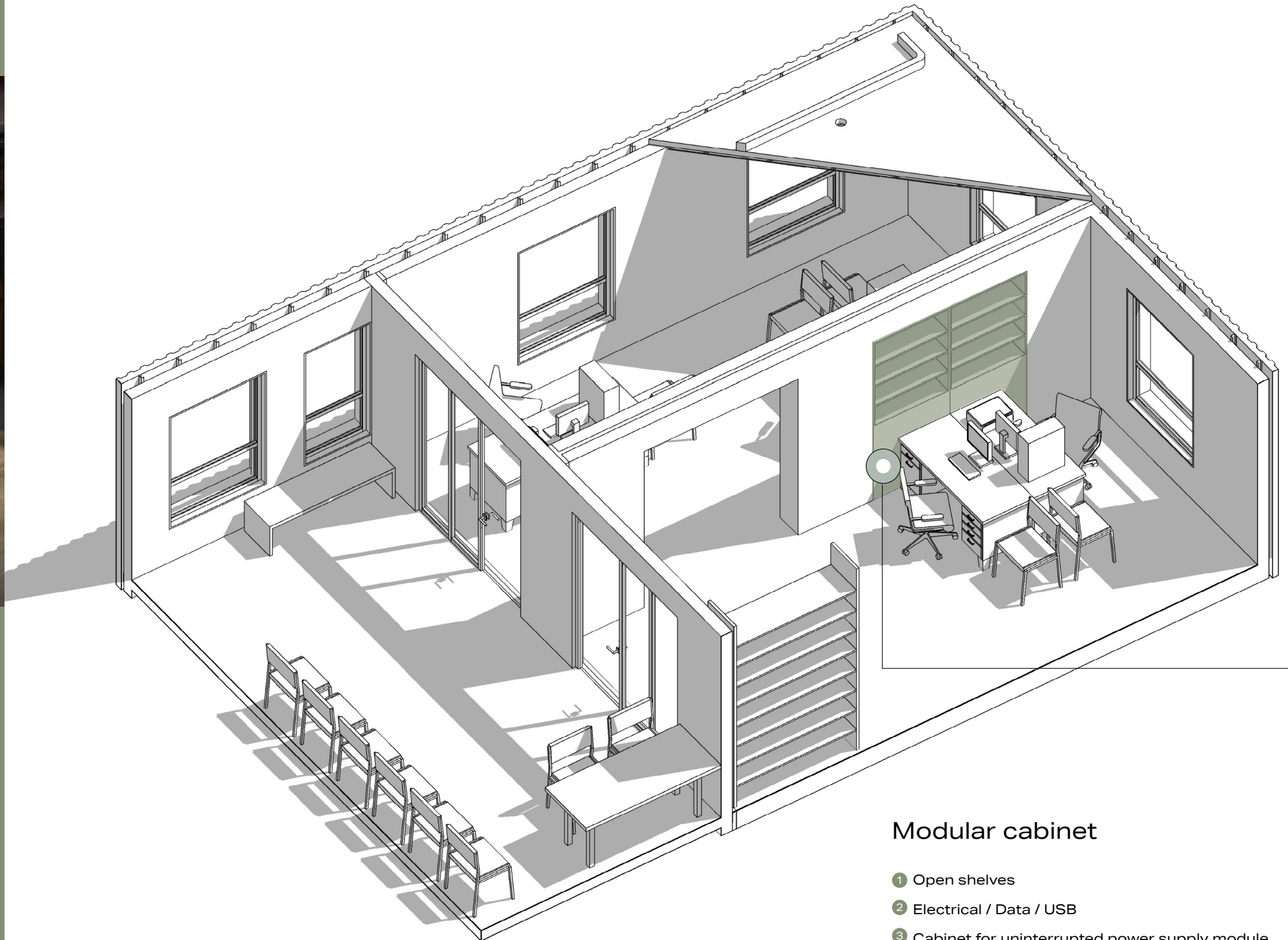
THIS BUILDING WHICH CAN BE ERECTED IN LESS THAN 2 WEEKS, COMBINES THE ESSENTIAL EMERGENCY SERVICES FOR THE COMMUNITY: POLICE, MEDICAL AND FIRE





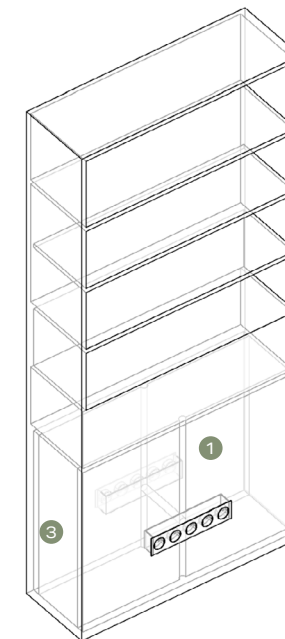
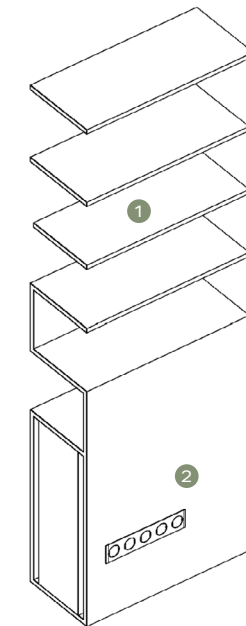
DALL-E.
OIL RENDERING OF
A FIREFIGHTER

BY STACKING SPEEDSTAC MODULES, THE POTENTIAL FOR CONSTRUCTING VERSATILE BUILDINGS WITH MULTIPLE COMPLEMENTARY USES IS UNLOCKED. WITH CONCRETE AS THE PRIMARY MATERIAL, THESE STRUCTURES ARE PURPOSEFULLY DESIGNED AND CONSTRUCTED TO WITHSTAND POST-DISASTER EVENTS WITH RESILIENCE AND STRENGTH



Modular cabinet

- ① Open shelves
- ② Electrical / Data / USB
- ③ Cabinet for uninterrupted power supply module

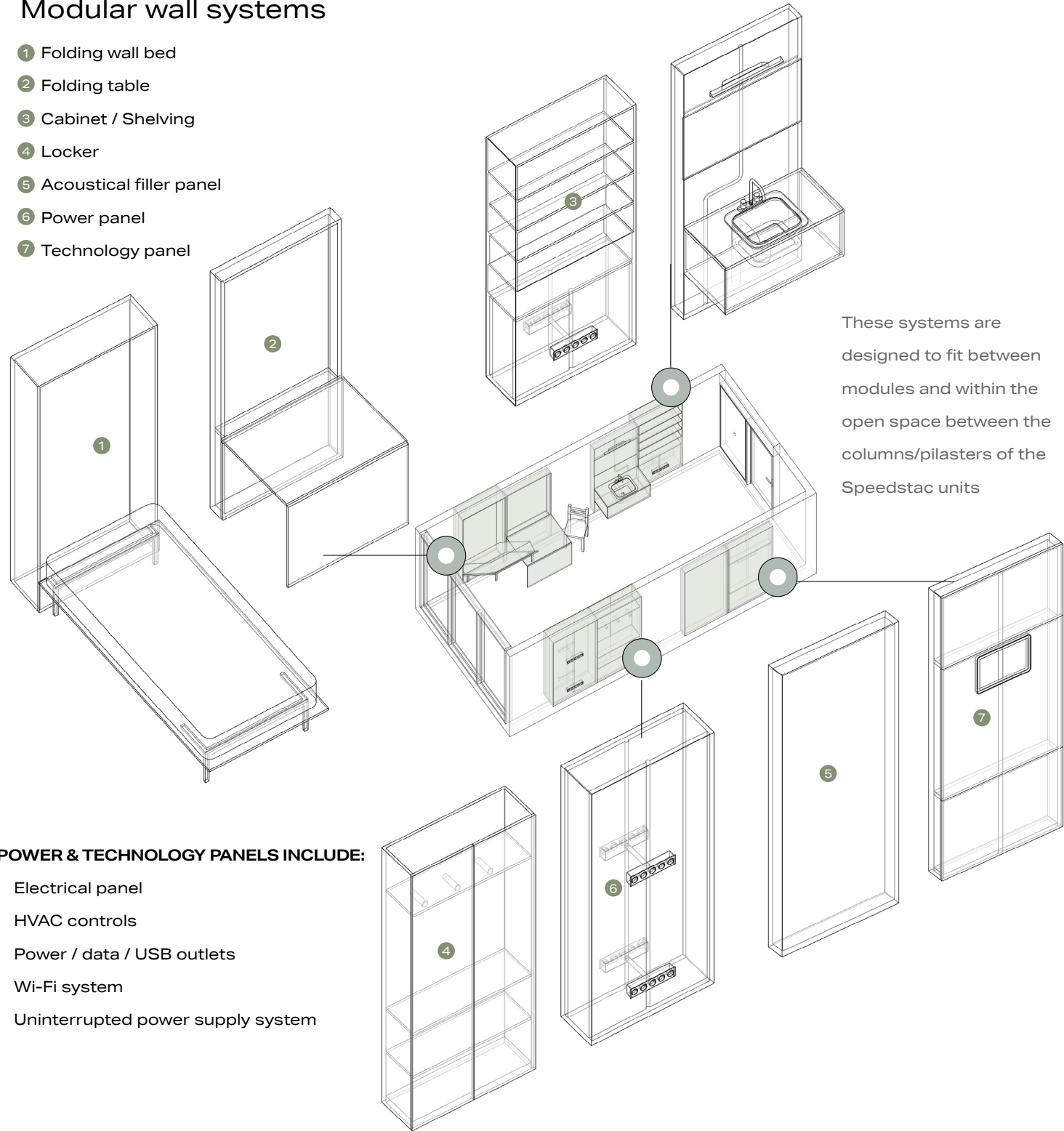






Modular wall systems

- ① Folding wall bed
- ② Folding table
- ③ Cabinet / Shelving
- ④ Locker
- ⑤ Acoustical filler panel
- ⑥ Power panel
- ⑦ Technology panel



These systems are designed to fit between modules and within the open space between the columns/pilasters of the Speedstac units

POWER & TECHNOLOGY PANELS INCLUDE:

- Electrical panel
- HVAC controls
- Power / data / USB outlets
- Wi-Fi system
- Uninterrupted power supply system





SPEEDSTAC
STAND WITH UKRAINE