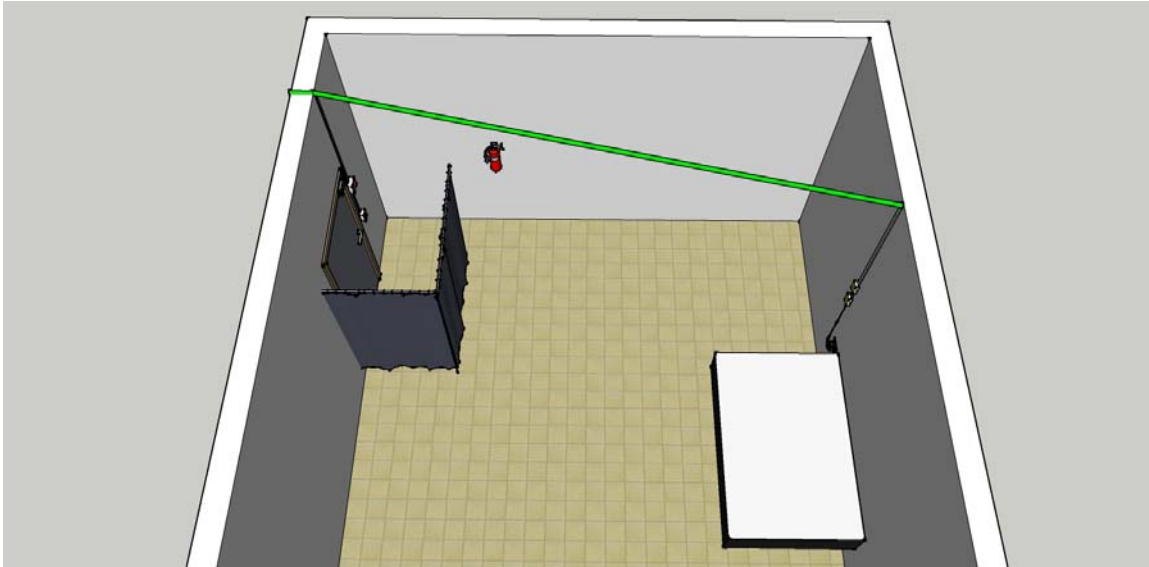


Laser Safety Systems

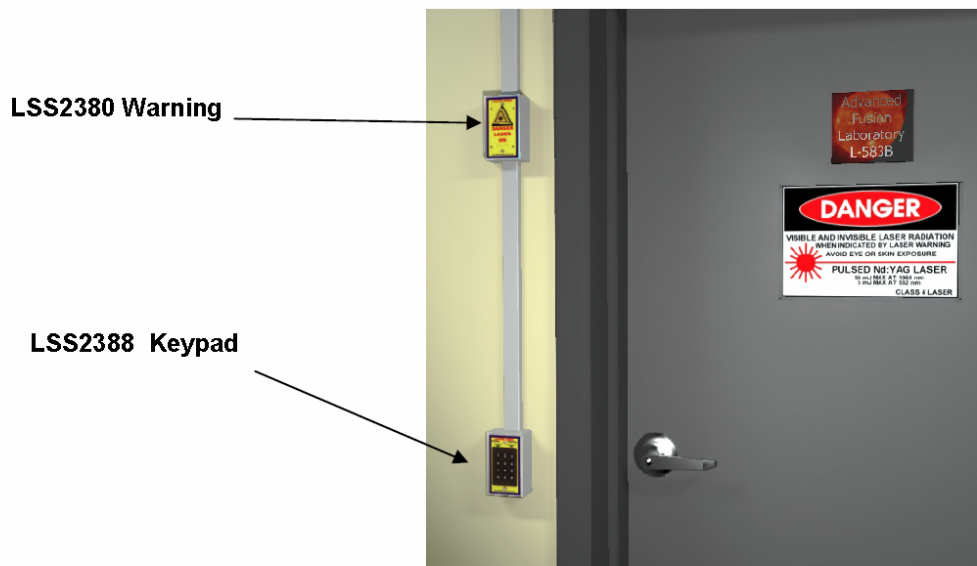


**Your Engineered Laser
Safety Solution**

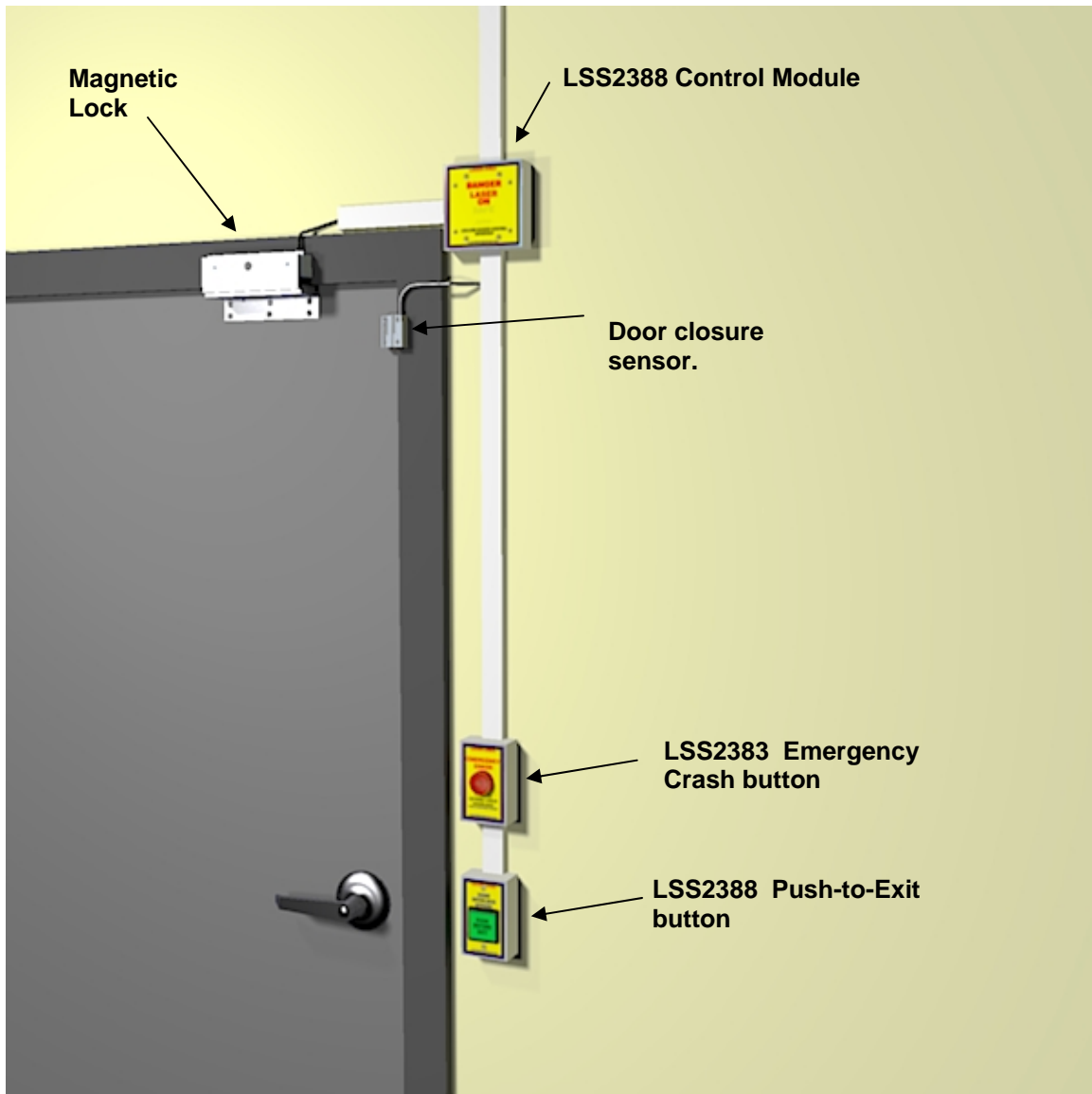
The following plan describes a typical room using the LSS2388 Defeatable Access Control kit when a magnetic lock is used.



The image above shows a top view of a typical lab. The green line above the room represents the cable run of the eight conductor interlock cable provided with your system. Notice how the line starts at the front door and ends at the laser table. This “start” to “end” run will be evident when reviewing the final schematic. Note: When using a defeatable access, the laser is NOT secured during authorized entrance or egress. If there is a potential for exposure over MPE, we recommend a curtain labyrinth to prevent exposure to personnel in hall during door opening.

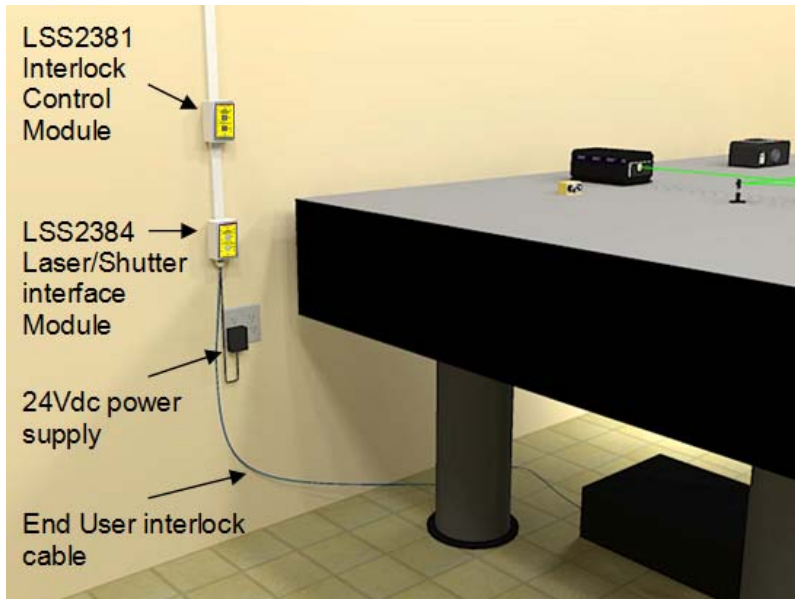


The front door is shown from the exterior. The LSS2380 Warning module is the starting point of our system. Authorized laser workers can bypass the door interlock by entering a pass code.



Interior exit is shown above. The door components are installed as described in the LSS2388 User Manual and maglock installation manual. The Push-to-exit module permits egress without tripping the door interlock.

Whenever a Magnetic Lock is used, an Emergency Crash button should be placed on the interior side of the door. This button will crash the interlock and directly break power to the magnetic lock in an emergency. To meet ADA compliance, the Push-to-exit and Emergency Crash modules should be located between 48" and 54" above finished floor level. In addition, some localities may require a connection to the building fire alarm system to automatically trip the interlock and break power to the magnetic lock whenever the fire alarm is activated.



The LSS2381 interlock control is placed at any convenient location in the room. Here we have shown it installed near the table to allow the user to arm and disarm the entire system from the table. The LSS2384 laser/shutter interface module should be installed near the laser table and within 5 feet of a power outlet. The LSS2384 accepts system power from a 24VDC Wall Wart power supply and allows connection to the laser or shutter provided by the end user. The LSS-2384 can interlock two lasers or shutters.

This installation plan shows a surface track and surface boxes for installation. Laser Safety Systems carries a selection of Hellermann-Tyton low-voltage surface mount track, boxes, and interconnects. These components are completely compatible with a laser cleanroom environment and use a simple “peel and stick” double sided permanent tape. Using this material, the entire installation can be made without drilling any holes in the walls. Some drilling will be required at the door casing to mount the magnetic lock and door limit switch.

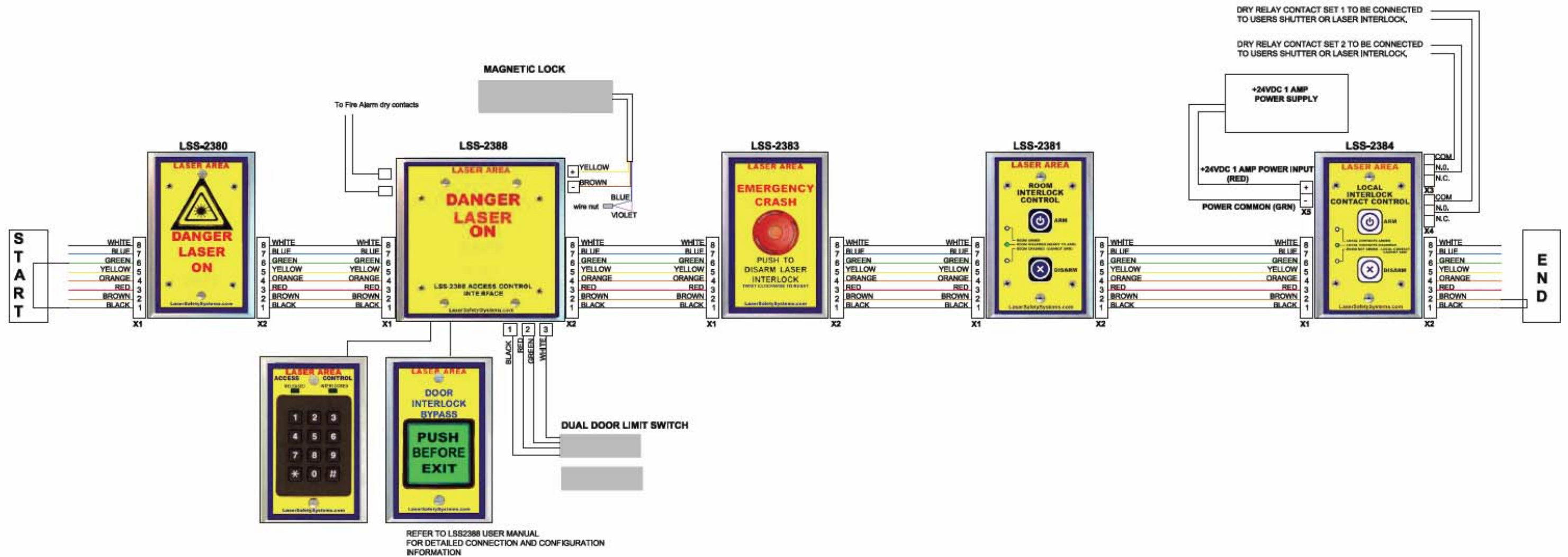
The modules can also be mounted using conventional metal boxes and conduit, or they can be dropped into the wall using “drop-in” boxes. The cable provided with the system is UL Plenum rated, so it can be run within walls or above a false drop ceiling without conduit.

The following schematics represent the entire electrical connection requirement for the system described in this proposal. Details of individual modules are shown in the installation and operation manual. These particular manuals can be downloaded from:

http://www.lasersafetysystems.com/files/LSS2388_Installation_and_users_manual.pdf

http://www.lasersafetysystems.com/files/Laser_Safety_Systems_user_manual.pdf

TYPICAL INTERLOCK CONTROL SYSTEM SCHEMATIC



Note: Modules can be placed in any order desired as long as the start and end are terminated. The schematic layout shown above is only a suggestion.