

# Integrated Facility Systems™ (IFS)

CASE STUDY • EDUCATIONAL FACILITY



**Abstract:** A large school district in Tennessee purchased Eaton Corporation's space-saving Cutler-Hammer Integrated Facility Systems (IFS) for their senior high school. By installing IFS, as opposed to conventional electrical room equipment, the school district was able to increase the size of their classrooms as a result of a 53% reduction in electrical room floor space. Meanwhile, the contractor was able to save over 2,100 hours of labor time.

**Project Type:** New, High School  
**Construction Cycle Time:** 11 Months  
**IFS Line-ups:** 8  
**Scope:** Replaced Traditional Distribution and Control Package consisting of 64 Panelboards, 16 Transformers, and associated pipe, wire, and fittings.

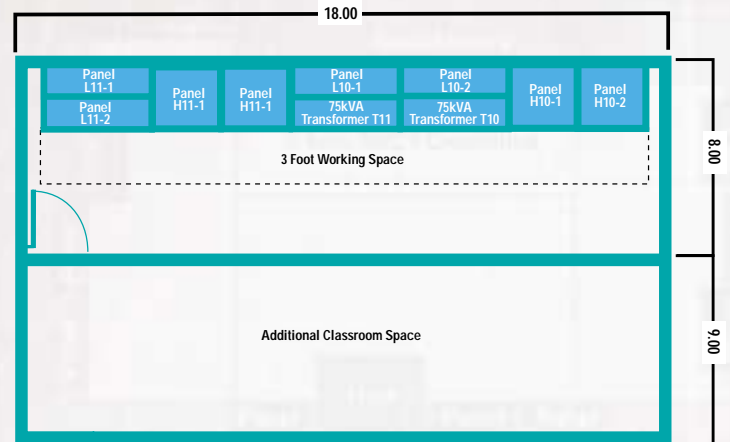
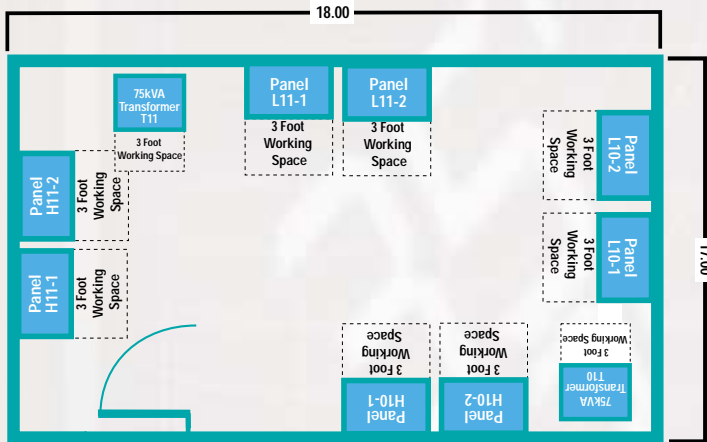


**EAT•N**

**Cutler-Hammer**

# Conventional Design

# IFS™ Design



For Illustration Purposes Only.

	Before IFS	After IFS	IFS™ Switchboard
<b>Floor Space Savings</b>			<b>Space Savings</b>
Room Total Floor Space (Sq. Ft.)	306	144	162 Sq. Ft./53%
Room Total Floor Space (Cu. Ft.)	3,672	1,728	1944 Cu. Ft./53%
Dedicated and Working Space (Sq. Ft.)	74	63	11 Sq. Ft./14%
Dedicated and Working Space (Cu. Ft.)	884	760	124 Cu. Ft./14%
<b>Labor Cost and Material Savings</b>			<b>Cost Savings</b>
Estimated Labor Cost (Per Room)	\$15,946	\$476	\$15,470/97%
Total Installed Cost (Material and Labor)	\$27,154	\$14,708	\$12,446/46%
Individual Installed Pieces (Per Room)	448 Pieces	3 Pieces	183 Pieces/99%
Estimated Installation Time (Hrs.)	283 Hours	12 Hours	271 Hours
<b>Total Project Savings for 8 Electrical Closets</b>			<b>Total Savings</b>
Labor Savings			\$123,760
Total Installed Cost Savings (Material and Labor)			\$99,658
Reduction in Pieces Handled			3,560 Pieces
Total Hours Saved			2,168 Hours
Dedicated and Working Space (Sq. Ft.)			88 Sq. Ft.
Dedicated and Working Space (Cu. Ft.)			992 Cu. Ft.