

ELLERBE BECKET

1875 CONNECTICUT AVENUE, NW
WASHINGTON, D.C. 20009
(202) 986-2000
SEPTEMBER 10, 1992

GSA ACCESS FLOOR STUDY

U.S. GENERAL SERVICES ADMINISTRATION
Public Building Service
Design and Construction
Washington, D.C. 20405

E.B. COMMISSION NO. 7211-911C

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 - d. Access Floor with Systems Furniture

System 1: Full Cellular Floor - Steel Building

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Summary

EXECUTIVE SUMMARY

Scope

The purpose of this report is to perform a Twenty-Five Year (25) Present Value Analysis and study the use of *access floor systems* in GSA office facilities to determine the best value to the taxpayer and the government for open office plans.

Three *access floor systems* were studied and compared to base building scenarios using a full blend cellular floor in a steel framed building and a header duct system in a concrete framed building.

The *access floor systems* studied were:

- *Access floor system with a modular wiring system.*
- *Access floor system with a modular service fittings.*
- *Access floor system with distribution in systems furniture.*

Best Value

The study determined that the best value is an *access floor system with a modular wiring system*, in terms of cost to the taxpayer and benefits to the government for new facilities with open office plans. The *access floor system with a modular wiring system* saved 12% of the Net Present Value of the attributable initial costs and life cycle costs compared to the base costs for a cellular floor system.

The additional first cost of *access floor system* is significantly offset by reductions of both initial costs of power distribution and systems furniture used for open office plans and life cycle cost savings for reconfiguring office space.

The reduction of life cycle costs for the *access floor system with a modular wiring system* over the cellular floor system resulted in a payback period of 9 years.

Summary

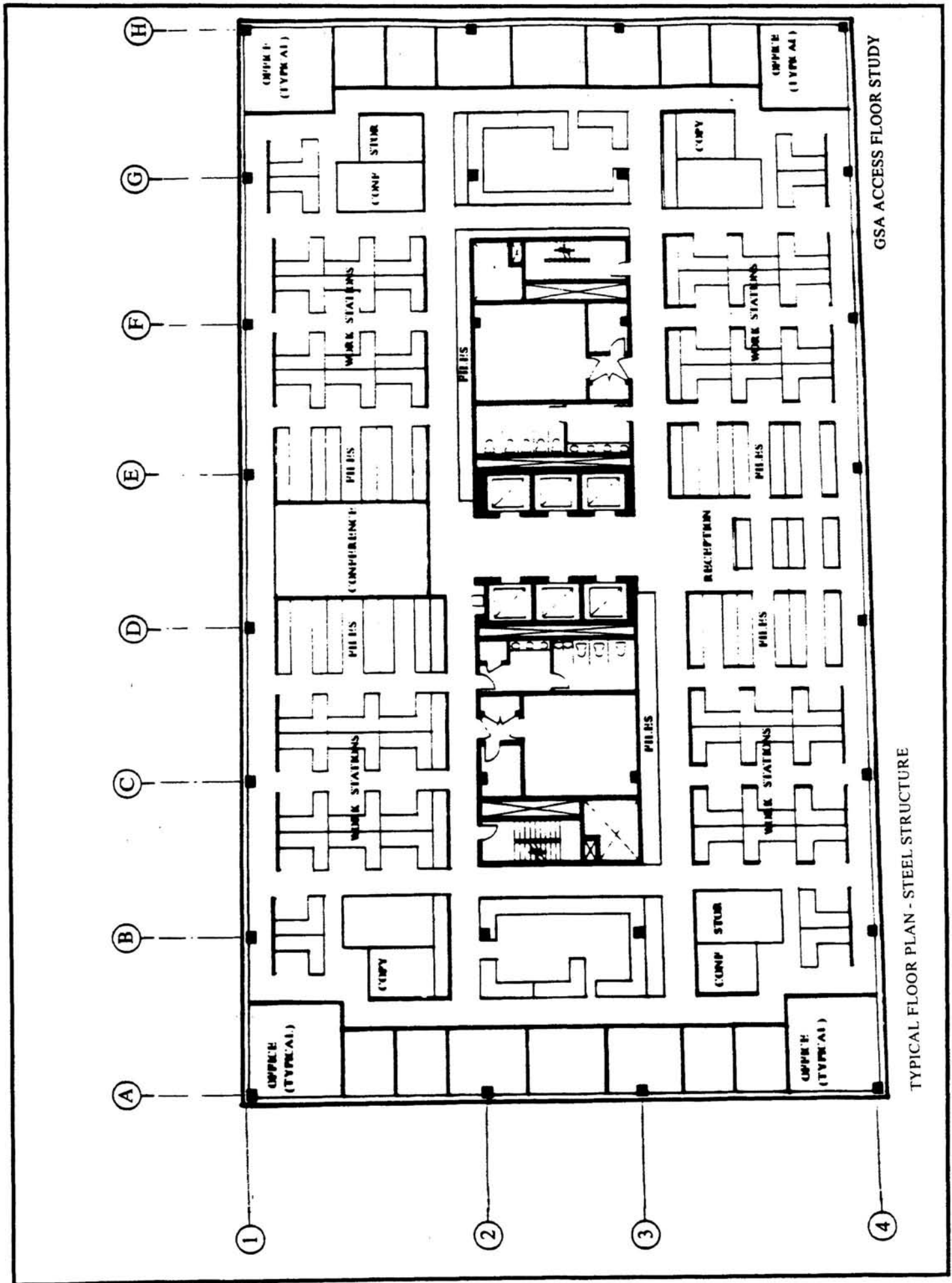
Comparable Value

The study determined that an *access floor system with a modular service fittings* is a comparable value to a full blend cellular floor system in terms of cost to the taxpayer and benefits to the government for new facilities with open office plans. While the initial cost of the *access floor system with a modular service fittings* is about twice the cost of a cellular floor system, the life cycle cost were so much lower that the Net Present Value were essentially the same.

Sensitivity Factor

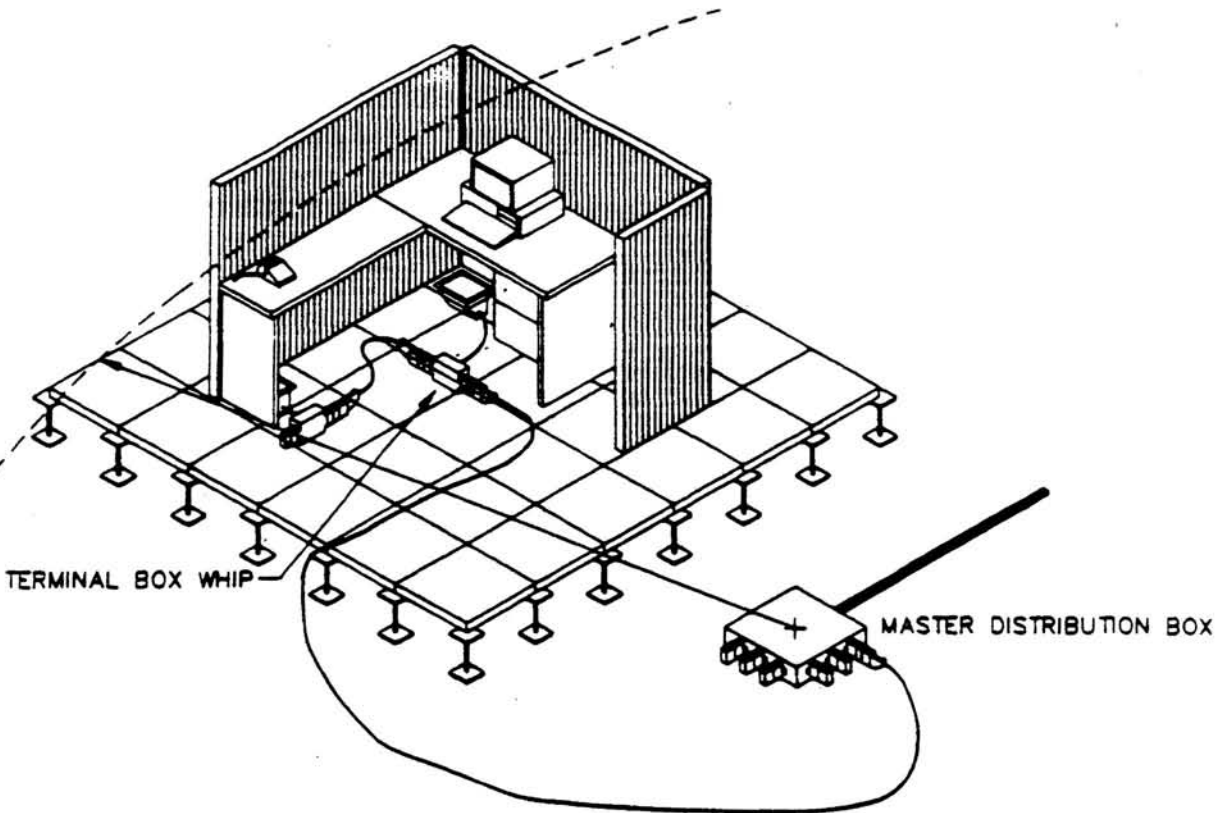
Each system studied was checked for sensitivity of Net Present Value to changes in the proportion of open office area to building area. The basis for the study was 50% open office area, so 25% and 75% open office area were used to establish sensitivity factor.

STEEL BUILDING		Percent of Study NPV (50% Open)	
	25% Open	75% Open	
System 2 - Cellular Floor System	58%	1.42	
System 3A - Access Floor with System Furniture	72%	128%	
System 4A - Access Floor with Modular Service Fittings	81%	121%	
System 5A - Access Floor with Modular Wiring System	83%	117%	
CONCRETE BUILDING		Percent of Study NPV (50% Open)	
	25% Open	75% Open	
System 1 - In-Floor Header Duct System	50%	150%	
System 3B - Access Floor with System Furniture	72%	128%	
System 4B - Access Floor with Modular Service Fittings	79%	121%	
System 5A - Access Floor with Modular Wiring System	83%	117%	

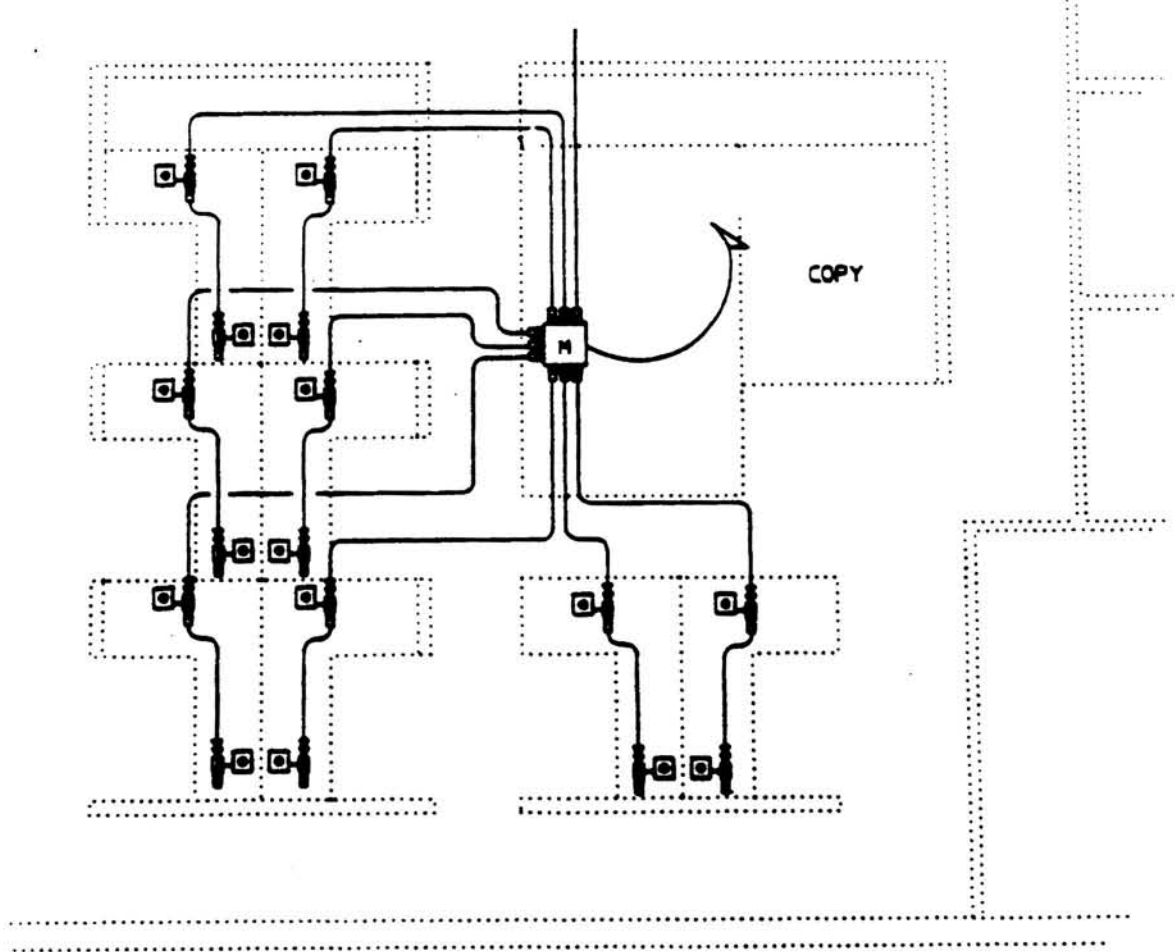


GSA ACCESS FLOOR STUDY

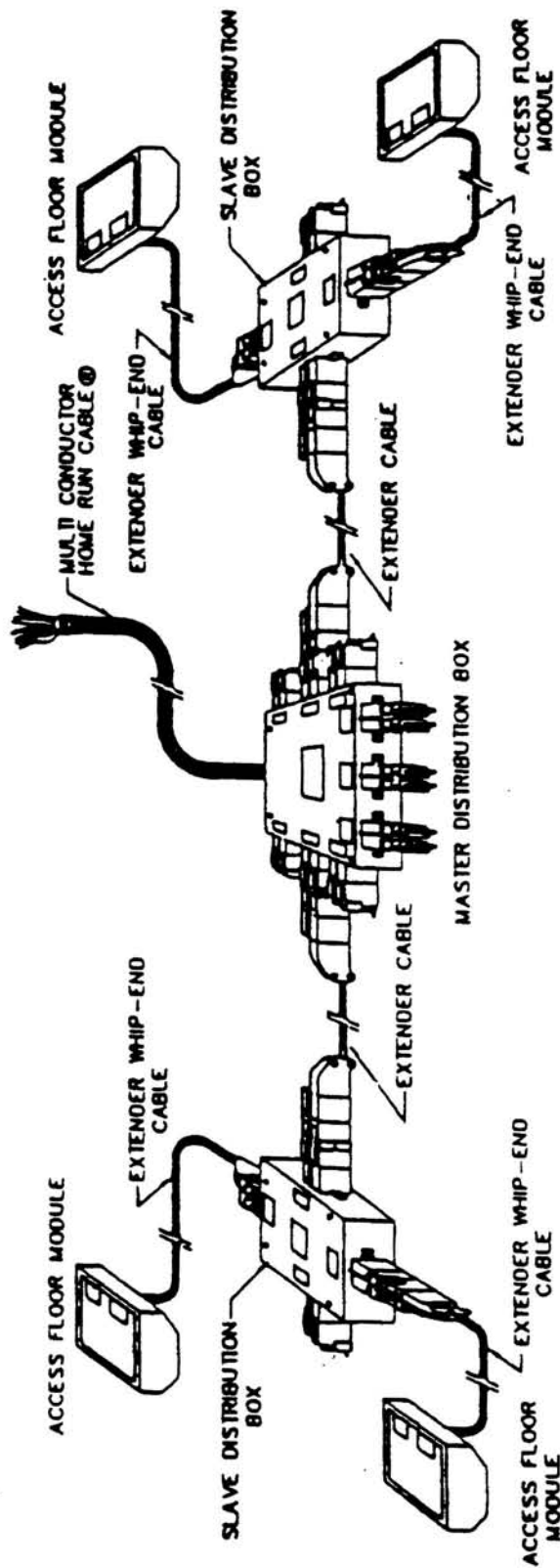
TYPICAL FLOOR PLAN - STEEL STRUCTURE



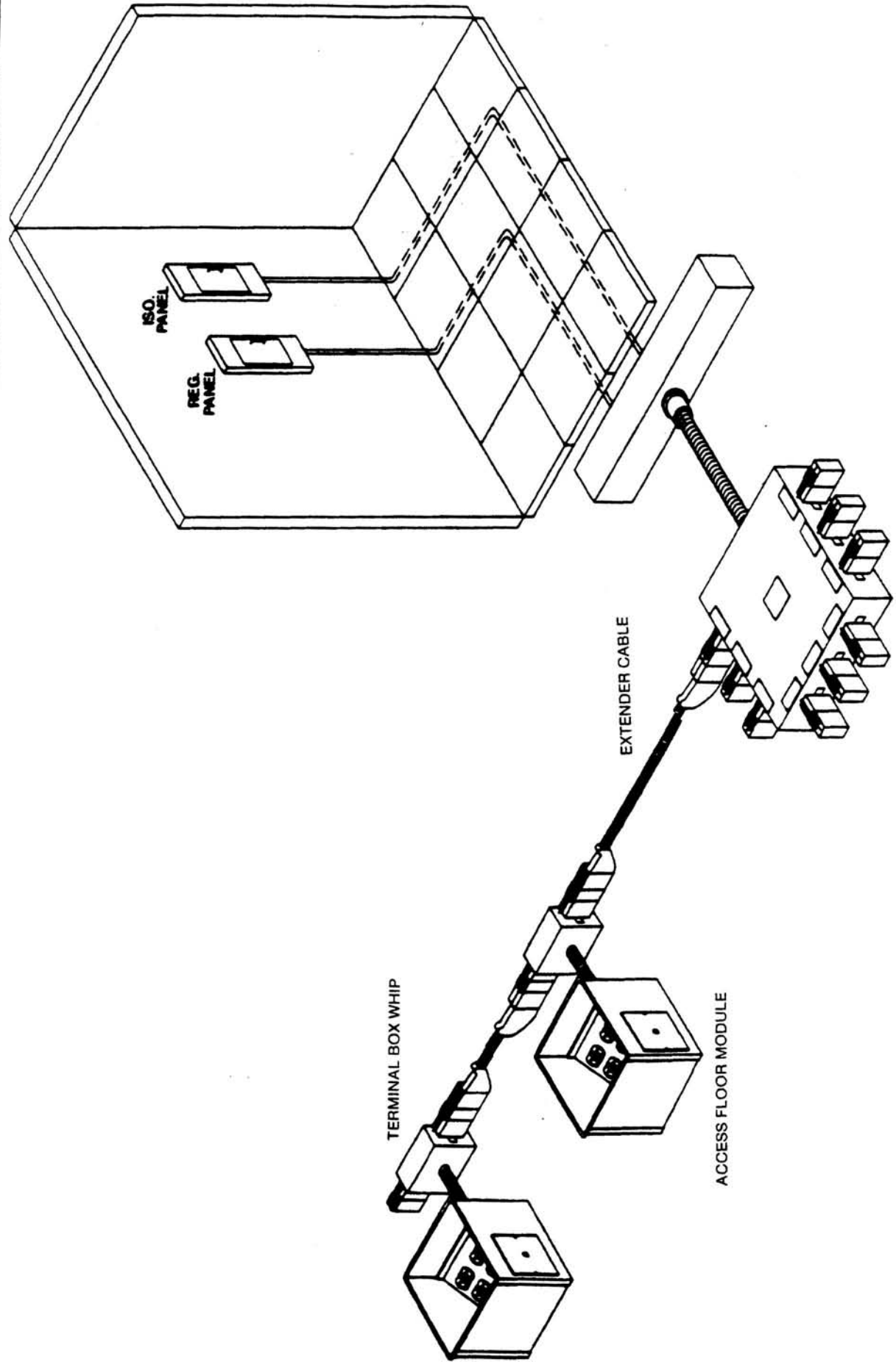
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