DESIGNING AND INSTALLING VAPOR BARRIERS TO MEET THE REQUIREMENTS FOR THE GAS TIGHT PLENUM CLOSURE ALLOWANCE IN ANSI/AARST CC-1000

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Table 4.3	Plenum Size Restrictions	
Nominal inside pipe diameter	Maximum size of Soil Gas Collection Plenum(s) per duct size	
	Where compliant plenum installation is verified by inspection per Section 5.10.2	Size allowed where gas-tight plenum closure, per Section 6.3.2, is also provided
3 inch (7.6 cm)	3,500 square feet (325 m^2)	4,000 square feet (372 m^2)
4 inch (10.2 cm)	6,200 square feet (575 m^2)	7,100 square feet (660 m^2)
6 inch (15.2 cm)	14,000 square feet (1,300 m^2)	16,000 square feet (1,486 m^2)
	Where any plenum installation is not verified by inspection per Section 5.10.2	Penalty for non-compliant gas permeable layer per Section 5.5
3 inch (7.6 cm)	2,500 square feet (232 m^2)	1250 square feet (116 m^2)
4 inch (10.2 cm)	4,500 square feet (418 m^2)	2250 square feet (209 m^2)
6 inch (15.2 cm)	10,000 square feet (929 m^2)	5,000 square feet (465 m^2)

Table 4.3 Text

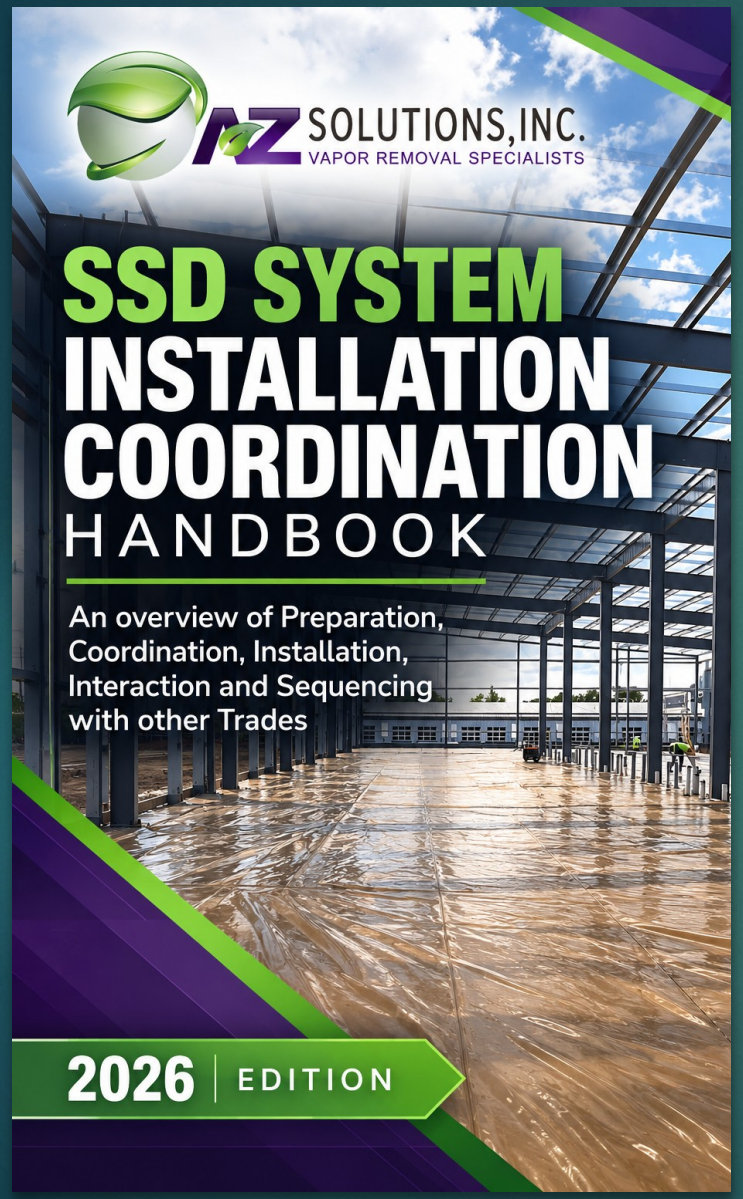
	Design Category			
Scope of Work	**1**	**2**	**3**	**4**
Correct Plenum Materials		x	x	x
Specifications	x	x	x	x
Visual Inspections			x	x
Performance Verification				x
Pipe Size	**Area per Riser (FT2)**			
3 inch	1,250	2,500	3,500	4,000
4 inch	2,250	4,500	6,200	7,100
6 inch	5,000	10,000	14,000	16,000

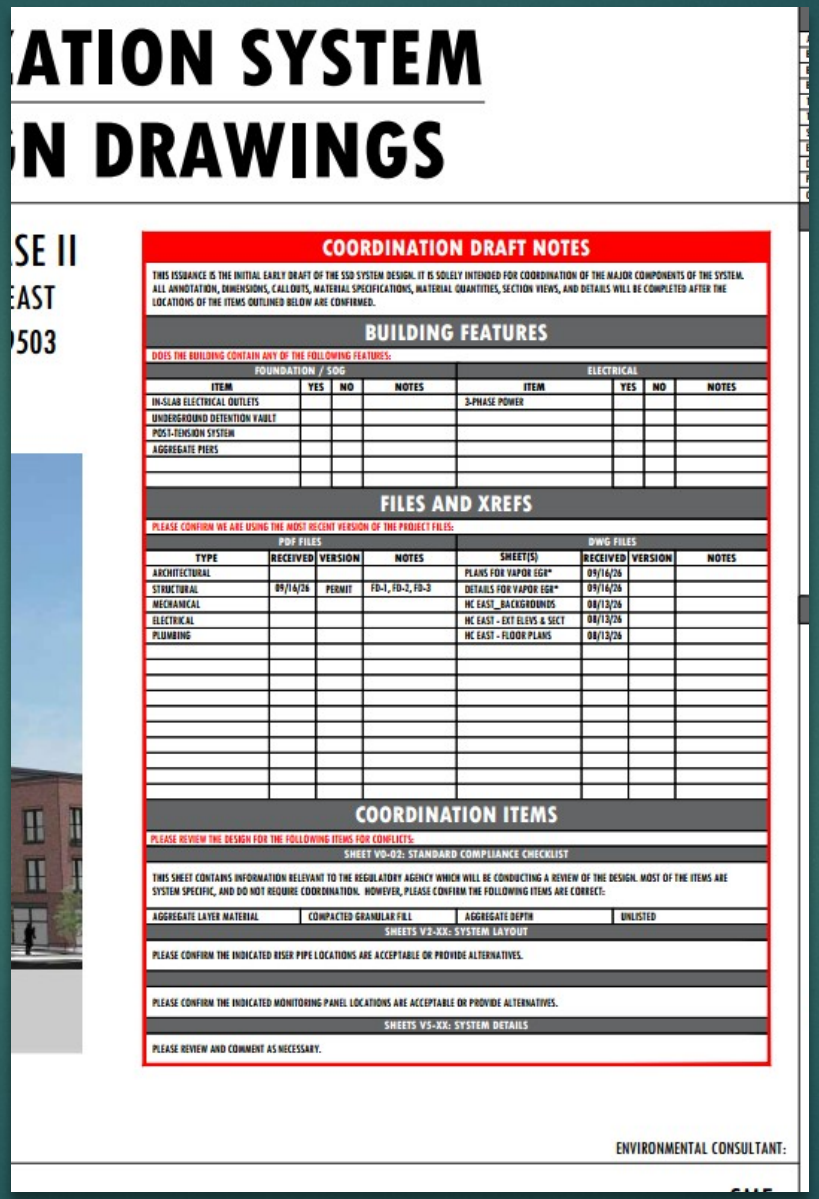
Table 4.3 Reorganized

Use Cases for Gas-Tight Closure

- Brownfields / Vapor Intrusion Mitigation.
- Mid-Rise and High-Rise Buildings where riser pipes are expensive to install.
- Active Systems where you want to reduce the Long-Term Operating Costs.







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COORDINATION DRAFT NOTES

THIS ISSUANCE IS THE INITIAL EARLY DRAFT OF THE SSD SYSTEM DESIGN. IT IS SOLELY INTENDED FOR COORDINATION OF THE MAJOR COMPONENTS OF THE SYSTEM. ALL ANNOTATION, DIMENSIONS, CALLOUTS, MATERIAL SPECIFICATIONS, MATERIAL QUANTITIES, SECTION VIEWS, AND DETAILS WILL BE COMPLETED AFTER THE LOCATIONS OF THE ITEMS OUTLINED BELOW ARE CONFIRMED.

BUILDING FEATURES

DOES THE BUILDING CONTAIN ANY OF THE FOLLOWING FEATURES:

FOUNDATION / SOG				ELECTRICAL			
ITEM	YES	NO	NOTES	ITEM	YES	NO	NOTES
IN-SLAB ELECTRICAL OUTLETS				3-PHASE POWER			
UNDERGROUND DETENTION VAULT							
POST-TENSION SYSTEM							
AGGREGATE PIERS							

FILES AND XREFS

PLEASE CONFIRM WE ARE USING THE MOST RECENT VERSION OF THE PROJECT FILES:

PDF FILES				DWG FILES			
TYPE	RECEIVED	VERSION	NOTES	SHEET(S)	RECEIVED	VERSION	NOTES
ARCHITECTURAL				PLANS FOR VAPOR EGR*	09/16/26		
STRUCTURAL	09/16/26	PERMIT	FD-1, FD-2, FD-3	DETAILS FOR VAPOR EGR*	09/16/26		
MECHANICAL				HC EAST_BACKGROUNDS	08/13/26		
ELECTRICAL				HC EAST - EXT ELEVS & SECT	08/13/26		
PLUMBING				HC EAST - FLOOR PLANS	08/13/26		

COORDINATION ITEMS

PLEASE REVIEW THE DESIGN FOR THE FOLLOWING ITEMS FOR CONFLICTS:

SHEET V0-02: STANDARD COMPLIANCE CHECKLIST

THIS SHEET CONTAINS INFORMATION RELEVANT TO THE REGULATORY AGENCY WHICH WILL BE CONDUCTING A REVIEW OF THE DESIGN. MOST OF THE ITEMS ARE SYSTEM SPECIFIC, AND DO NOT REQUIRE COORDINATION. HOWEVER, PLEASE CONFIRM THE FOLLOWING ITEMS ARE CORRECT:

AGGREGATE LAYER MATERIAL	COMPACTED GRANULAR FILL	AGGREGATE DEPTH	UNLISTED

SHEETS V2-XX: SYSTEM LAYOUT

PLEASE CONFIRM THE INDICATED RISER PIPE LOCATIONS ARE ACCEPTABLE OR PROVIDE ALTERNATIVES.

PLEASE CONFIRM THE INDICATED MONITORING PANEL LOCATIONS ARE ACCEPTABLE OR PROVIDE ALTERNATIVES.

SHEETS V5-XX: SYSTEM DETAILS

PLEASE REVIEW AND COMMENT AS NECESSARY.

ENVIRONMENTAL CONSULTANT:

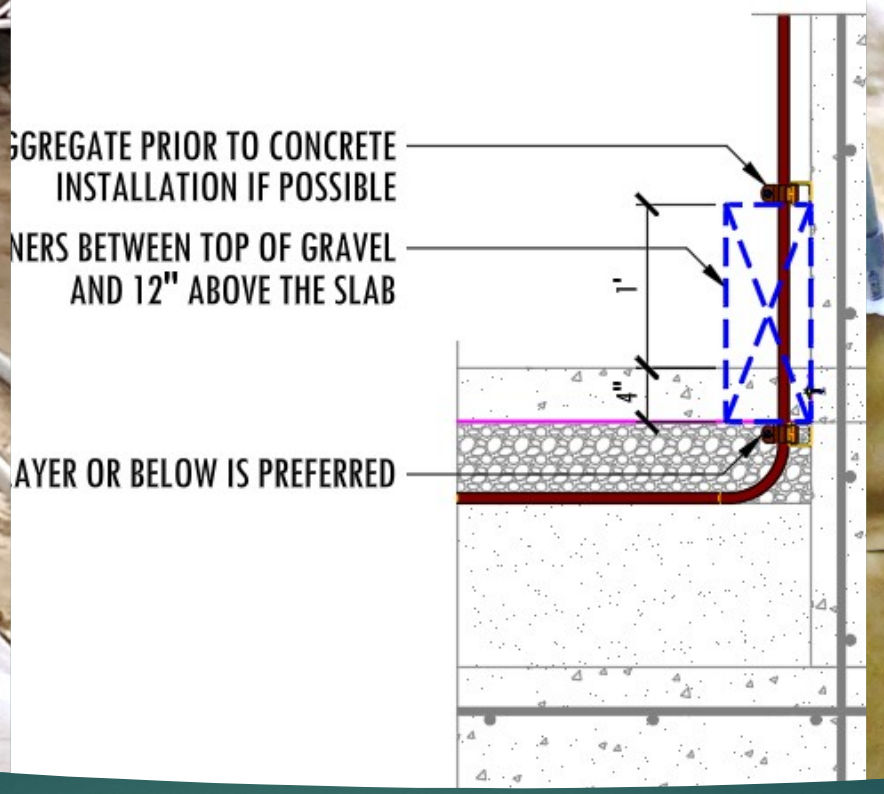
Gas Tight Barriers Require Extra Communication from the start

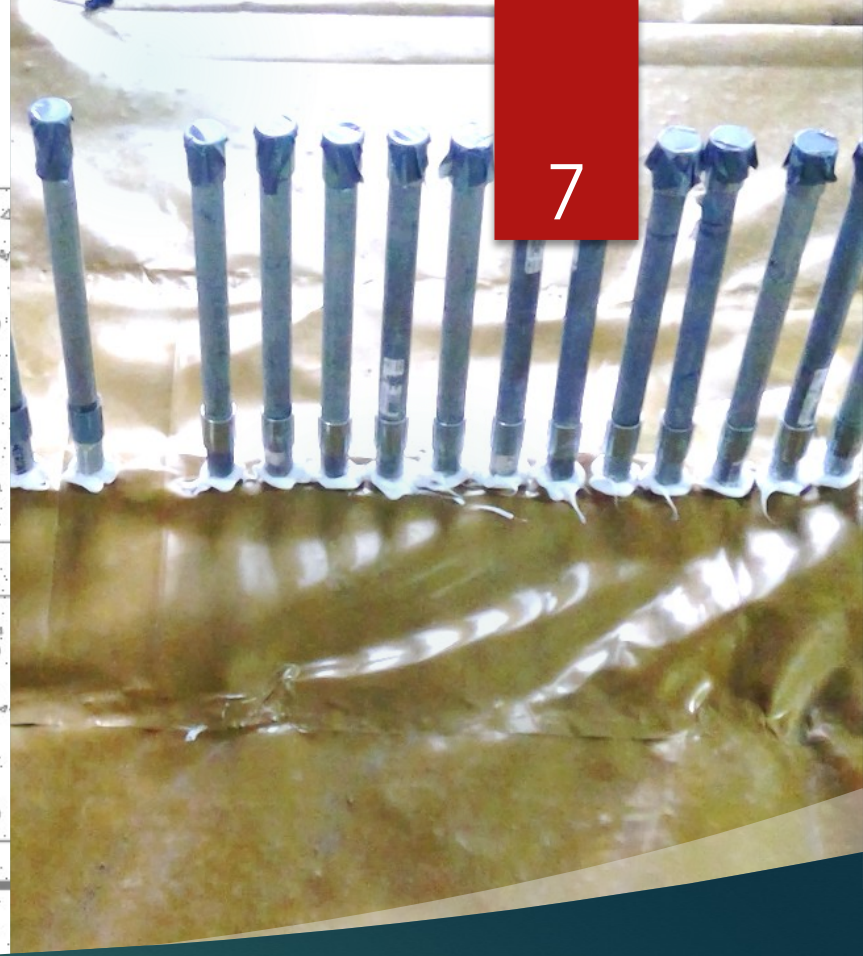




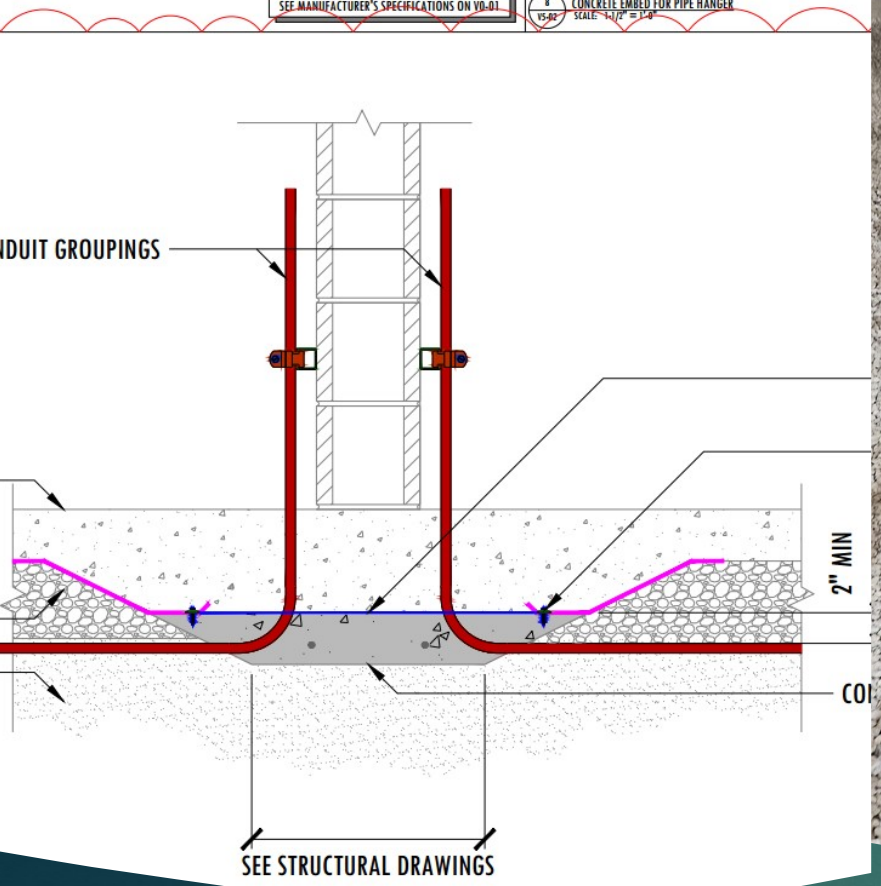
Trench Drains







Conduit Fastening







Conduit Bank Sealing





Termination Bar

Welded Seams







Smoke Testing Equipment

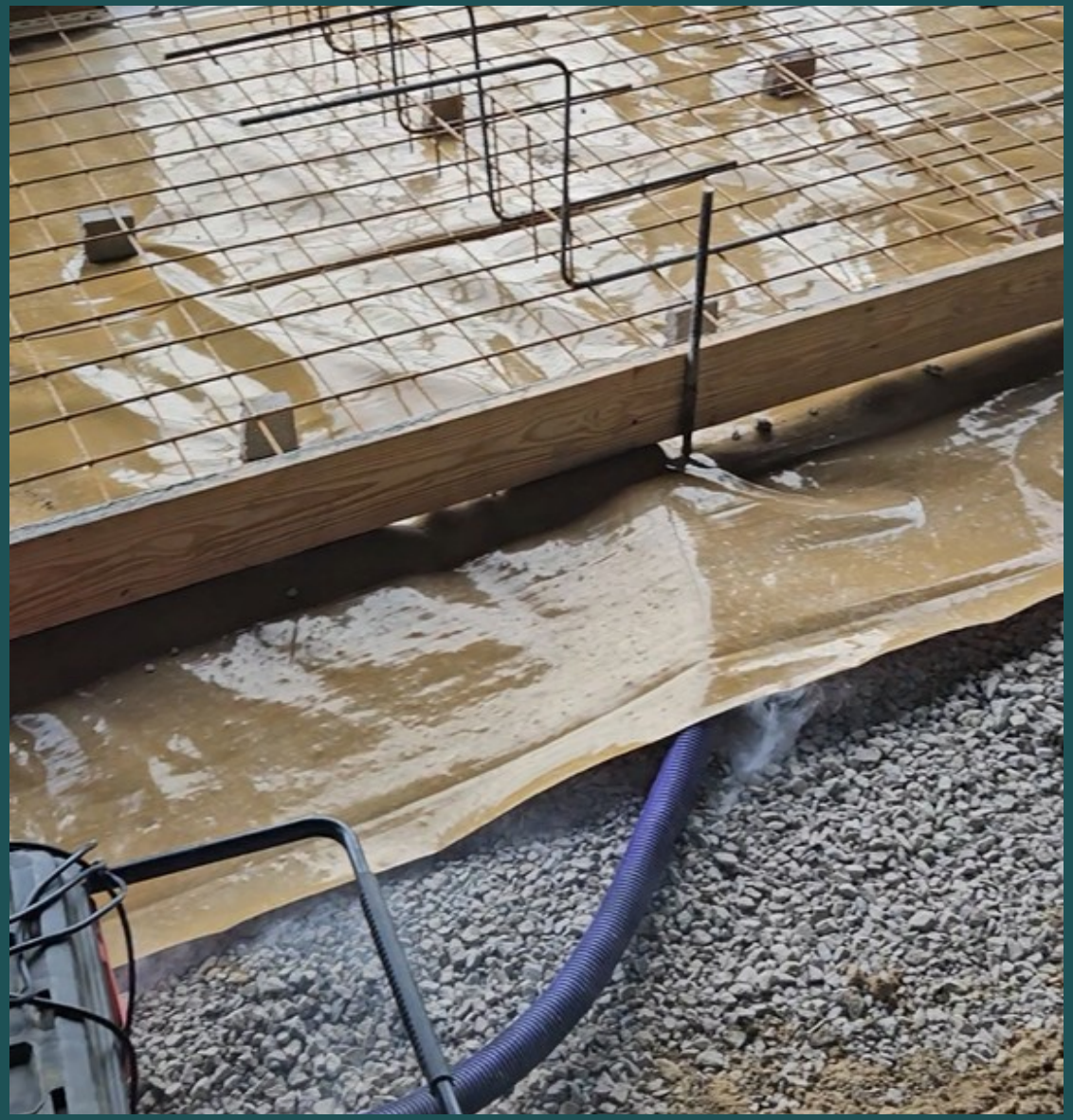
The Secret Weapon to Great Installations

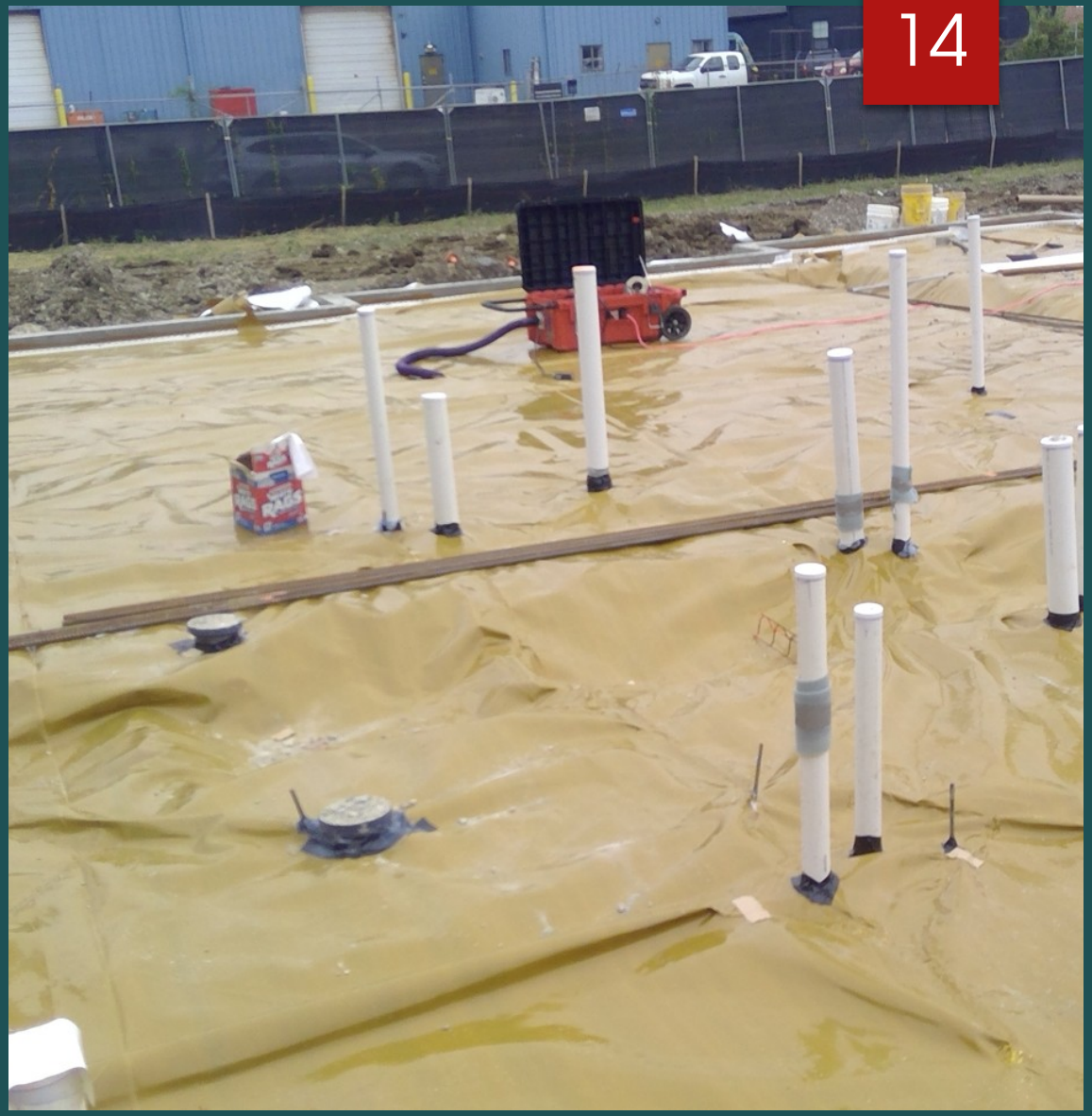


Traditional Leak Spots



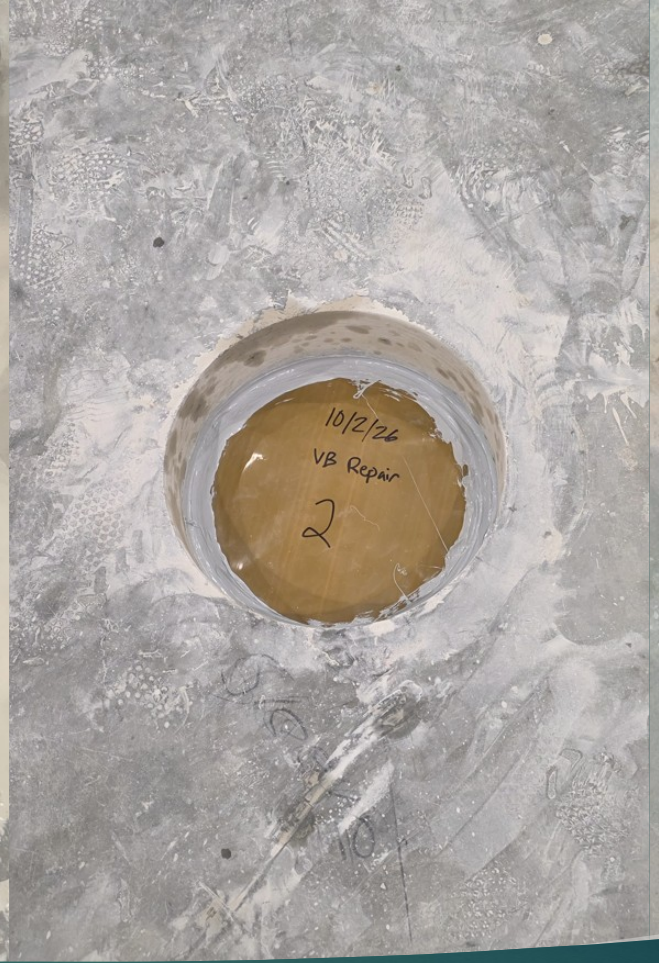














You Can’t Plan for Every Issue

Thank You!

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VAPOR REMOVAL SPECIALISTS



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