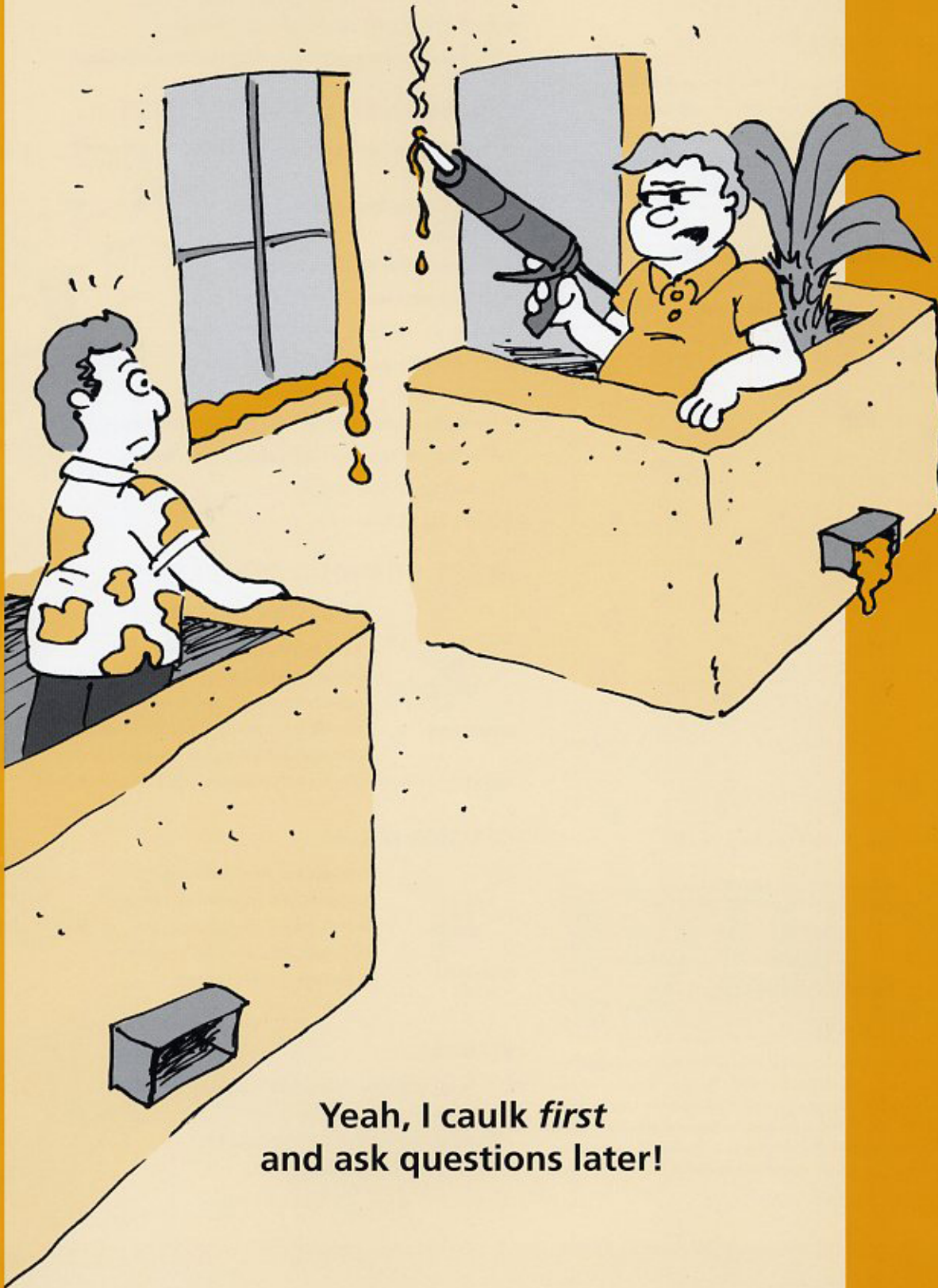


SEALING YOUR FATE...



BUILDING ANALYSTS



Yeah, I caulk *first*
and ask questions later!

WHY SOME SEALANTS FAIL

SEALANT OR CAULK?

Caulking is commonly used to fill holes, cracks and gaps, whereas *Sealants* are specially formulated to seal voids between construction elements to keep the weather out and maintain special separations. Their purposes may include:

- Prevent infiltration of air and water
- Accommodate differential movement
- Keep objects out
- Isolate fire, smoke, fumes, vibration, noise

USE THE RIGHT STUFF!

All too often the wrong sealant is used for a job-at-hand, leading to eventual failure and damage. Nearly all sealants are designed for a specific range of materials, exposures and movement. This table is a general summary of the performance characteristics for most commonly available sealant types and their best appropriate use.

SEALANT SELECTION MATRIX

Use	Common Silicone	Polyurethane	Latex/Acrylic
Submerged	1	4	1
Interior	4	2	4
Exterior	4	4	1
Window (Glass) Perimeter	4	1	1
Traffic Joints	3	4	1
Tub/Shower	4	1	1
Paintable	1	4	4
Chem Resistance	4	3	1
EIFS	1	4	1
Exterior Stucco	1	4	1
Tilt-up	1	4	1
Pre-cast	1	4	1
Cast-in-Place	1	4	1
Masonry	1	4	1
Curtain Wall	1	1	1
High Performance Coatings	1	1	1
UV Resistance	4	2	1

1 = Not Recommended 2 = Poor 3 = Better 4 = Best

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SUMMER 2008 NEXT ISSUE: ???

INSTALL SEALANTS CORRECTLY

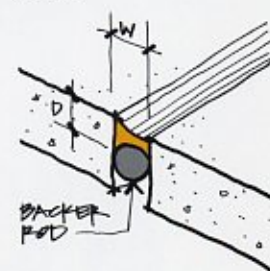
In addition to selecting the right sealant materials, joints must be an acceptable size and shape. Then they must be prepared properly and sealants must be installed correctly to perform as expected. For best results:

- Prepare the bonding surfaces per the sealant manufacturer's instructions
- Use proper kind of backer rod to establish best depth/width ratio, support sealant, and promote curing
- Avoid plugging up reliefs and weeps
- Tool sealant for proper bonding and to shed water

CRITICAL SUCCESS FACTORS

- Providing enough access for sealant application
- Selecting the best sealant for the application
- Preparing the surfaces correctly
- Proper joint spacing, width and depth
- Adequate amount of bonding surface
- Installing sealant per manufacturer's instructions
- Using the right primers and backing materials
- Placing sealants carefully, clean, and steady
- Cleaning-up thoroughly
- Allowing to fully cure

SEALANT = 1/2 WIDTH
DEPTH



MOST COMMON PROBLEMS

ADHESION FAILURE



This most common failure occurs when sealant does not adhere to one or more of the bonding surfaces, usually from improper preparation or using a sealant with inadequate flexibility to accommodate actual movement.



COHESION FAILURE



Sealant adheres to bonding surfaces but its internal strength is not suited for the amount of movement and the sealant is literally pulled apart.



STAINING

Oils from improperly selected sealants migrate into adjacent finish materials, collecting dirt and grime deposits and causing permanent stains.

