

COLUMN FOR MAY 22, 2004.

HEADLINE; SEALANTS, BACKER RODS AND CAULK.

Q: I had my home inspected late last year and the home inspector recommended that the windows and doors be caulked. It turns out that it was never done from the beginning and the home is ten years old. The inspector recommended some caulking in the bathroom too. I went to the lumberyard and there is a huge display, where do I start?

A: I can remember some years ago in my former life as a builder where we had two kinds, latex for the bathroom and silicone for the exterior. Our reader is right, there are over a dozen makers of sealants and an endless variety on the market today. Lets first get the terms clear. Caulk is a boat building term, from the wooden boat era. Sealant is the correct term for the housing industry. Today both terms are used and what you really need to concentrate upon is what you are going to seal. Why do we need sealants? When a building is assembled the openings where the windows and doors are made slightly oversized. This allows the carpenter's space for shims if levelling of the window is needed. Windows and doors should not be fitted tight; if the building has some settlement I have seen picture windows crack because the contractor put them in too tight. Sealants have one singular purpose, fill the gaps between materials and this keeps Mother Nature out and the heat in.

The first thing to consider is where you are going to use the sealant. The main consideration should be how much movement and what surface you are applying the caulking too. Almost all of the sealants on the market today are user friendly, some more so than others. The only sealants I recommend most homeowners stay away from is the polyurethane formula's. They have their place but they are toxic and generally only recommended for high traffic areas like a concrete floor of a garage or a driveway. First lets simplify the caulking maze. There are six common formulas, some are blended but this is generally done for specific installations. The most common is old faithful, latex caulk and this often has vinyl or acrylic formulated with it. Some have biocide added and this is a good idea. It helps to resist mildew but don't be fooled, it resists it does not eliminate mildew and this can stain the sealant. These are often called the water based caulking so don't be confused, it just means they clean up with water. They are easy to use and have a smooth consistency. They are usually the most economical and for interior work they will fill most voids and small openings. If you have larger openings, buy a product called backer rod. This is a rope like polyurethane filler for larger openings. To install this it should be slightly thicker than your openings. There are two kinds, open and closed cell and I have used these with great success especially in older homes where movements has created uneven cracks. Use the open cell for interior cracks and the closed cell on the exterior. Carefully pack it in with a stiff putty knife, one with a blunt end so as to not cut the backer rod. Now apply the caulk with a full bead, you are trying to attach the sealant to the side of the opening, not the backer rod as many people think. Backer rod is used to support the sealant so it retains its flexibility. Sealant in fact should not be any thicker than it is wide to promote correct curing and adhesion.

Silicone sealants have also been around for some time, over 20 years from what I know. They are best used on metal, glass or any non-porous surface. They have proven their worth for exterior use, they are tough and flexible. The downside is they are messy, require solvent for clean up and cannot be painted. This is the reason so many are coloured co-ordinated to match vinyl siding and windows; this was a common homeowner complaint. Some of the window manufacturers now have their own sealants that match their coloured windows frames. Silicone can be applied in cool weather; they are not affected dramatically by the sun and are mould resistant. Some of the new kids on the block as far as sealants go are Synthetic rubber, Butyl and Modified Silicone Polymers. Synthetic Rubber is very elastic and is great for wood sided homes, log homes and any area where there is a possibility of frequent climatic movement of the surface being caulked. They can be painted with latex paints and can be applied in wet or cool weather. Their drawback is they are flammable until cured and have considerable shrinkage. Here a full even bead is the only way to go. I used this on my home,

our siding is wooden and it took some getting used to after using silicone for so many years but once you get the flow it makes a nice job. Butyl sealants are for specialized applications. They are commonly used to seal evertrough and flashings. They are the most water resistant of all the sealants on the market however. One new sealant on the market that I have not tried is the Modified Silicone Polymers. They are claimed to be the end all to be all of sealants, apply in any temperature, easy to apply, extremely durable and flexible. Some of the manufacturers are claiming that these new sealants will out last silicone two to one. They are claimed to be the final answer for windows, doors and vents. Their only drawback at present, they are very expensive. I would wait a few years on this one to see if they prove out, compared to a good grade of silicone they can be almost twice the price. On the other hand if you are willing to try them, you may end up not resealing your openings for many years.

And now the answer to last weeks "Trivia about Homes" question. This one was a little tricky; a shake is a wood shingle. Shakes however are defects found in lumber when sawn. And now this weeks question. What is "Neat Cement" is it A) smoothly towelled cement B) a method of concrete forming for trim C) a cement mixture made without sand or aggregate D) A Specialty type of cement. The answer in next week's column!

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