Hospital, Health Care and Educational Application of Sheet Vinyl Flooring

More and more hospitals, health care facilities and schools are using homogeneous sheet vinyl flooring with welded seams in areas requiring an aseptic or clean environment, such as operating rooms, emergency rooms and pharmacies. It is also used in corridors of schools or dialysis rooms of health care facilities. This product is used for its clean, uncluttered look and finish. In addition this homogeneous material lends itself to all kinds of creative design elements such as artistic insets, borders and free flowing patterns. Just like any other flooring material not understanding this product, the environmental conditions required for installing it, substrate conditions and how to install it properly with great emphasis on welding the seams can result in massive headaches, exorbitant costs and strained relationships, not to mention the failure of the installation.

For starters the proper product should be selected for the expected performance. This is actually the key to the selection and application of all floorcovering materials. Next is the selection of a flooring contractor who has years of experience working with this type of product. This is one of those flooring materials that, relative to installation, your first shot has to hit the bull’s eye or you’ll have to start over. The substrate has to be clean, level and free of any debris or inconsistencies, even a tiny pebble, or else it will telegraph through the material. The substrate also has to be dry; no moisture vapor emission rates over 3 pounds and the alkalinity low at 7 to 9 ph. This is what manufacturers of these products recommended. Anything other than this and you’ll be dealing with the material lifting off the slab, bubbles, wrinkles, marks in the floor that will look like jeeps driving through the sand and seam welds popping out and seams turning black. This is sheet vinyl and it is non-permeable, moisture will not pass through it. You don’t want to have to shut down operating rooms to not only replace the floor but to remediate the slab as well. Remember what we said about massive headaches, exorbitant costs and strained relationships? This is a perfect example. Whether you’re the, client/end user, architect, specifier, designer, general contractor or flooring contractor, your saying “damn the torpedoes full speed ahead” won’t change the trouble you’ll make for yourself. One of you is going to get blamed, if not two or three of you, for making...
the decision to forge ahead and defy the laws of physics. Every found guilty of causing the failure, in full or part, is going to participate in the blame, responsibility and financial cost of fixing it.

Back to installation - the application of the adhesive and using the proper adhesive have to be adhered to. Of serious concern is applying the adhesive with a trowel. If there is too much open time, if the wrong adhesive is used that dries to firm, if the wrong trowel is used, if the flooring material is not rolled properly or in a timely manner, the trowel marks can and will show through the face of the sheet vinyl.

And when a high gloss finish is applied there are going to be some very unhappy people who don’t especially like swirlly patterns showing through the face of their floor. Check with the manufacturer to see if the adhesive can be rolled on instead or better yet do a test installation and put the high gloss finish on the floor to see if there’s going to be a problem. Test a large enough area to be able to tell if the trowel marks will show. Better to take the time in the beginning and avoid a major complaint than to suffer when the job is done.
Seaming this type of material is also critical. Seams done wrong in this material will cause the installation to be deemed a failure. This is where a master installer is the key to a successfully finished job. A master installer’s skills are like that of the surgeons using the operating rooms he installs the flooring material in when it comes to making the seams. This is a critical factor, the installer of this type of material will make or break the job; they must be skilled journeymen to install this material properly. And they must be provided with a substrate that will not compromise the installation.

With the right product in the right place installed properly and maintained correctly, the end user will enjoy years of service from the flooring material. And everyone else can move on to the next project with a sense of accomplishment and satisfaction.

Following the instructions:
Men are famous for not following instructions. Most mechanically inclined men, even those that think they are, feel they can figure out how to put something together, install it, fix it or otherwise pull off something, should work without having to read the instructions. This is the reason so many items get put together with pieces left over, trips to the emergency room by men increase at Christmas time and we get yelled at by our wives or significant others for being idiots. One of the biggest reasons for floor covering problems including installation failures is that the installation instructions, if they exist or are furnished don’t get read. Projects are specified with the belief the installers will know how to actually install the product, someone will figure out what should be done with it and by some miracle it will be properly maintained, well that ‘ain’t necessarily so.

Who’s responsible for what?
Start from the beginning with the specifications on a project being written without mentioning installer qualifications. That gets left up to whom? The GC, end user, someone else? To start a project it’s important to understand that the flooring products being specified for the job can’t just indiscriminately be installed by anyone. It requires special skills to install various flooring materials such as welded sheet vinyl, patterned carpet, glass tiles, or wood and cork floors. The architect or specifier has to take this into consideration. The manufacturer is
not going to suggest their flooring be installed by just anyone. By doing so they may assume responsibility for any installation problem that might occur. It’s probably more likely a failure will occur from a non qualified installer and the manufacturer usually gets blamed for the problem anyway until it is proven who is actually responsible. The general contractor is often left to select the flooring installers and he’s usually looking for the best price. You can’t get quality work by going with the lowest price. The electricians have to be licensed as do the plumbers and the GC has to use these guys to meet code. No rules or codes exist for flooring installation. What if the flooring material fails due to a substrate issue? First to get a call is the flooring contractor or the manufacturer. What do these people know about concrete substrates? It’s not their area of expertise. To establish responsibility everyone has to assume some. The Carpet and Rug Institute several years ago had a guide named the Areas of Responsibility. It covered everyone in the chain from manufacturer to consumer and what their responsibilities were. This little document which we still have a copy of was simple but at least it gave a modicum of responsibility to everyone in the participating chain. In my opinion who’s responsible for what, should be part of the specification for commercial construction projects and in particular for the floor covering portion. This would simply be putting everyone involved in this part of the project on notice as to what is expected of them relative to their area of expertise and that they will be held accountable should something they did, or didn’t do, cause a failure.

The Specification:
Specifications should be standardized and formatted to insure the project is delivered on time and most importantly, properly done. Far too often there is just general information in the specification and, on top of that, a lot of the information is not current or correct. We’ve looked at specs for clients and wondered where the writer got the information they provided. Recently a spec referred to the industry installation guidelines and specifically to a particular paragraph. No such correlation was found, even going back years to previously published guidelines, the reference could not be found and confirmed. The specification should be written in such a way as to include the scope of the flooring project, what is expected of who and why. What the testing should be for the substrate, conducted by whom and the information shared with all parties. There should be specifics about what flooring materials are to be installed, the qualifications of the
flooring contractor and those of the installers. There should be proof and accountability from the flooring contractor on the history of experience for the projects they’ve worked on and also of the installer. The flooring contractor should know what types of products are being used on the project and, again, prove that they and their installers have experience working with these products. And the manufacturer should be involved, through their technical people, so they know where the product is to be used and if anything in particular has to be done to successfully install the product. It can also be written in the spec that the manufacturer has to provide one of their tech services installation people be on site at the job start up to insure everyone and everything is as it should be to prevent problems later. Far too often the installers don’t know what type of flooring their supposed to install, after bidding the job, and are surprised when they see what it is. As a result they may not have allotted enough time to install the material, they likely bid too low to do the job the way it is supposed to be done and worse may not have the skills required to work with the product.

Unfortunately this happens on all sizes of projects and its worse today. With the shortage of work and everyone scrounging for it the low price bidder looks awfully good. But the old adage that, “you get what you pay for” still stands. If you pay cheap you get cheap. Cutting costs by engaging people who are not qualified to do a job almost always costs more in the long run. In our business we see this stuff all the time and it’s getting worse. If you think by hiring the least expensive contractor that if there is a problem later on, you can stick them with it, think again. Where do you think they’re going to come up with the money to replace tens of thousands of dollars worth of flooring material? Where’s the savings then when the GC or end user has to shell out the cost of fixing the job? Who wins when you have to pay attorneys to fight the fight? You have to do it right the first time because no matter how much it costs to do it right by hiring true professionals the first time it will be far less expensive than having to fix a failure later.

If you need help or guidance with a project call us, we know how to keep you out of trouble. And if you’re already in trouble call – we can determine what went wrong, why, whose to blame and why and what can be done about it.
• GUIDANCE AND CONSULTING ON ALL FLOORING MATERIALS, SUBSTRATES, CONCRETE AND MOISTURE ISSUES

• COMPLAINT, CLAIMS ASSISTANCE, AND ONSITE PHYSICAL INSPECTION

• MEDIATION AND DISPUTE RESOLUTION

• IDENTIFYING CONCRETE, MOISTURE AND FLOORING FAILURES

• LEGAL CASE ASSISTANCE AND PROFFERED EXPERT WITNESS

• SPECIFICATIONS, CONSULTING AND INFORMATION – BEFORE AND AFTER THE SALE

• OVERSEE MANUFACTURING AND INSPECTION OF PRODUCT AT THE SOURCE

• EDUCATIONAL SEMINARS

• CERTIFIED PRODUCT TESTING

• INSTALLATION OVERSITE, GUIDANCE CORRECTION AND SPECIFICATION WRITING

• INSURANCE LOSS EVALUATIONS