STEPS to creating a good strong weld in vinyl floor sheeting

"As an interior designer, I often notice the poor quality of welding evident in many vinyl floor sheeting installations. I would like to know what the steps are to create a good strong weld with vinyl floor sheeting. Morris I

With more than 50 years' experience in the local and international flooring industry, Denver Coleman, Chairman of Polyflor SA, answers questions posed by installers, architects and readers. In this issue, he discusses the steps to creating a good strong weld in vinyl floor sheeting.

STEP 1

Trim off the factory edge of the vinyl sheets

The factory edges of the vinyl floor sheets may not always be square. There are several useful tools for trimming off 5mm easily, giving an accurate, square edge for butt joining the sheets. Don't skip this step as it will lead to an unsightly finish.

STEP 2

Overlap, scribe and cut your sheets As per the manufacturer's data sheets, ensure that you overlap, scribe and cut (with a hook blade) your sheets to give a tight butt join. A common mistake among installers is to leave a space the thickness of a matchstick between the sheets. This is incorrect and is a result of bad training which is likely to lead to a badly welded and weak join.

STEP 3

Groove the tight butt join ONLY two-thirds through the sheet

An appropriate grooving tool needs to be used to groove the tight butt join. This needs to be done only two-thirds through the sheet. If you see the screed, you've gone too deep.

In large installations, an electric groover with a 3,5mm blade or grooving tip is best for speed consistency and accuracy. A "P-type" groover is used to hand groove, and is readily available from reliable manufacturers. Instead of resharpening the blades, make sure the blades are replaced regularly. Avoid using a triangular or similar scraper, as this will open the groove too wide and too deep resulting in a weak weld. Moreover, a groove that is too wide will result in dirt buildup in the groove, further aggravating the situation.

STEP 4

Ensure that the welding gun is set at the correct temperature Take the type of material into account because some materials may require a lower temperature so as not to burn the clear wear layer. Also take note of weather temperatures and adjust the welding temperature accordingly. Weld at a suitable speed to ensure a strongly fused join. Use special welding nozzles for PUR-coated products.

Do not hot knife the welds in an effort to close wide gaps as this only superficially closes small gaps, which can damage the sheet surface. Leaving a gap, or grooving with the incorrect tool such as a triangular scraper, will result in a wide gap and a visible hairline gap on each side of the weld. Dirt will collect in this space which will show up as a thin black line on either side of the weld. Very often, this weld will fail after a period of 6-12 months as it starts to pull apart.

STEP 5

Trim your weld twice A sharp, curved-edge spatula can be used for trimming. The first trim should be done with a trimming slide under the cutting edge of the spatula, trimming approximately 0,5mm above the sheet. This can be done while the weld is still warm. Once the weld has cooled down, use a spatula (without the trimming slide) for the second trim. Special trimming tools are available. There are also special Mozart weld trimming tools available instead of the spatula and slide method. These give an excellent finish.

Make sure the weld has cooled down. If it is still hot or warm, it will result in a concave weld, which is a potential dirt trap.

STEP 6

Glaze the surface of the weld Glazing the surface of the weld will give it a good finish, make it less dirt retentive and easier to maintain. Slowly pass the welding nozzle approximately 10mm above the completed and trimmed weld until the surface attains a slight shine or glaze.

For more information, visit www.polyflor.co.za, email marketing@polyflor.co.za or call +27 (11) 609 3500 to speak to Blythe or Wendy.

