



### **ARDEX SD-M - SUBSTRATES THAT CAN AFFECT THE PERFORMANCE OF THE FINISHED INSTALLATION.**

In both aesthetics and durability, ARDEX SD-M™ *Designer Floor Finish*™ has proven to be a strong performer for providing a skim coat finish for concrete and other recommended substrates. This includes solid, non-porous substrates when used with the appropriate primer, as well as ARDEX Toppings or Underlayments where the substrate below would allow the ARDEX SD-M to perform as expected. However, it has come to our attention that ARDEX SD-M is also being installed over ARDEX Underlayments where the substrate below does not allow for maximum performance of a thin layer topping. These problematic substrates include gypsum, wood and adhesive residues.

When installing an underlayment over such substrates, there is always a chance of superficial hairline cracking. This does not affect the long-term performance of the underlayment, and once finish flooring such as carpet, vinyl, wood, etc. is installed, this minor aesthetic shortcoming becomes a hidden non-issue. For example, hairline cracks that often develop in underlayments installed over cutback or wood do not affect the finished floor covering at all. However, these same cracks can telegraph into an ARDEX SD-M application, making for less than acceptable aesthetics.

In addition, finished flooring provides some “shock absorber” characteristics. For example, when ARDEX GS-4 is floated over deteriorated gypsum, the flooring helps protect the underlying gypsum from further deterioration. A skim coat of ARDEX SD-M over this same substrate allows the forces of traffic to be transmitted directly to the weakened gypsum, which has resulted in lowering the performance of the overall system.

For all of these reasons, we feel it important to the overall success of ARDEX SD-M installations to limit its use in certain applications as follows:

**ARDEX GS-4 / ARDEX LU-100 / ARDEX K 22 F:** The substrates below these underlayments are capable of adversely affecting the performance of the ARDEX SD-M. For this reason, we must clarify our position that ARDEX SD-M is not recommended as a finished wear surface over ARDEX GS-4, ARDEX LU-100 or ARDEX K 22 F.

**ARDEX K 15:** ARDEX K 15 is suitable for installation over a variety of substrates, including wood, metal and adhesive residues, prior to the installation of finished flooring. We have already established that a wooden subfloor can readily transmit cracking into a finished ARDEX SD-M installation. The same result can occur when the substrate is metal or adhesive residue. For this reason, we must clarify our position that ARDEX SD-M is not recommended as a finished wear surface over ARDEX K 15 when it is installed over wood, metal or cutback adhesive residue. The same would hold true for other ARDEX Underlayments in similar applications.

In summary, it has become apparent that there are many successful installations of ARDEX SD-M when installed directly over concrete or over an ARDEX self-leveler used to smooth standard absorbent concrete. It has also been determined that underlayments installed over many common problematic substrates can diminish the appearance and performance of our micro topping. This being the case, where pre-leveling is needed prior to the installation of ARDEX SD-M, only ARDEX K 500, ARDEX SD-T or ARDEX K 301 should be used.

If you have any questions on this information, or wish to further discuss a specific ARDEX SD-M application, please contact the Technical Service Department here at our Home Office in Pittsburgh.



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