



ARDEX TECHNICAL UPDATE

Update 100

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To : ARDEX Sales Professionals,
Regional Sales Managers & District
Sales Managers

From: ARDEX Technical Department

ARDEX GS-4™, ARDEX LU 100™ & ARDEX K 22 F™: CONSIDERATIONS FOR GRADE LEVELS

There are three grade levels that we come across on any given job site: below grade, on grade and above grade. While most of our products are suitable for installation on all grade levels, ARDEX GS-4, ARDEX LU 100 and ARDEX K 22 F are limited to “above-grade” applications only where the space below is properly controlled for temperature and humidity. While this may seem straight forward, there are some special circumstances when determining where these products can be used.

By definition, an on-grade substrate is one that has direct contact with the ground and sits on the surface of the earth. A below-grade substrate is also in direct contact with the ground, but is below the surface of the earth. Finally, an above-grade substrate is classified as being above the earth’s surface with no ground contact.

ARDEX GS-4, ARDEX LU 100 and ARDEX K 22 F are not suitable for on- or below-grade applications where moisture from the earth can emit through the substrate and affect the performance of the materials. However, if the substrate is at grade level but has an acclimated space beneath it (such as a climate controlled basement), ARDEX GS-4, ARDEX LU 100 and ARDEX K 22 F can be used, since moisture from the earth is not present.

Likewise, there are also occasions where the substrate is above grade, but the space below is not acclimated. A common example is a structure that has a parking garage from which one enters on the ground level, but the ceiling for the garage is also the floor for the interior room above. Because the garage space is not climate controlled but the space inside the room above is, moisture can be drawn up into the concrete floor-ceiling assembly and cause a moisture-induced failure. This also can occur on or below grade where parking decks descend several floors down as the grade level outside the building changes.

What this means in terms of installation recommendations is that ARDEX GS-4, ARDEX LU 100 and ARDEX K 22 F can be used on any grade level where the space below is climate controlled to the same temperature and humidity as the space in which the product will be used regardless of the actual grade level.

Please also note that ARDEX LU 100 and ARDEX K 22 F can be installed over concrete on any grade provided the concrete has been treated with an ARDEX MC Moisture Control System.

Should you have any questions on this information, or if we can be of further assistance, please don't hesitate to contact us.

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