## **TEST REPORT**

## Uzin Utz AG

Work Title:	Adhesive Recommendation			
Requested by:	Neil Johnson (Pliteq) via Linda Neuhauser			
Date of Request:	21.01.2021 (info to RAG-Team on 19.04.2021)			
Tested by: Reported by:	Stefanie Harscher / 26.05.2021   24.06.2021 Stefanie Harscher / 23.08.2021			
Received Samples:	Pliteq Ceniemat RST in 4 different thicknesses			
Task:	Bonding underlay to the substrate, followed by bonding LVT/PVC onto the bonded underlay.  Ideally both applications work with the same adhesive.  UZIN KE 49 HT must be also tested!			

Testing Area:

Climate:
20,2°C / 48-50% r.Lf.
Substrate:
UZIN NC 160
Oven / Long-term test:
8 Wochen 42,0°C

Floor Covering	Adhesive	Trowel	Peel Strength	Info
Pliteq Underlay + PVC	UZIN KE 2000 S 20.05.21 29522/120	A2	Very good adhesion (2,3 - 3,1 N/mm²) Good adhesive transfer	The thicker underlays have a strong bonding. The thinner underlays show punctual failures. The underlays don't pull over by shedding of the floor covering.
(Underlay and floor covering have both been bonded with an A2 notch trowel)	UZIN KE 2428 28.10.20 53367/622	A2	Very good adhesion (2,2 N/mm²) Good adhesive transfer	The thicker underlays have a strong bonding. The thinner underlays show punctual failures. The underlays don't pull over by shedding of the floor covering.
	UZIN KE 68 29.03.21 16277	A2	Very good adhesion (2,8 – ü3,0 N/mm²) Good adhesive transfer	The thicker underlays have punctual failures. The thinner underlays pull over by shedding of the floor covering.
	UZIN KE 49 HT	A2	Very good adhesion (2,0 N/mm²) Very goog adhesive transfer	The thicker underlays have a strong bonding. The thinner underlays show punctual failures. The underlays don't pull over by shedding of the floor covering.
	UZIN KR 430 (Chr. Unleserlich)	A2	Very good adhesion (2,8 – ü3,0 N/mm²) Very good adhesive transfer	The thicker underlays don't show a bonding with an A2 trowel. It has to be switched to a B trowel. The thinner underlays pull over by shedding the floor covering.
	UZIN U 2100 29.01.20	Nylon Plusch Roller	Fixed Good adhesion	
Floor covering on Pliteq underlay	UZIN KE 603	A2	Good adhesion Good adhesive transfer	No pulling over of the underlay (could work, but only for floor covering onto the underlay, not for underlay onto the substrate)

## Results:

Bonding of the Pliteq underlay onto the substrate works without any problems with the following adhesives:

- UZIN KE 2000 S
- UZIN KE 2428
- UZIN KE 49 HT
- UZIN KE 68
  - → When bonding the underlay onto the substrates, it has to be differed between the thicknesses of the underlay. Underlays thicker than 4 to 5 mm should be bonded with a B1/B2 trowel. The thinner underlays can be bonded with an A2 trowel.

Bonding of the floor covering onto the underlay works without any problems with the following adhesives:

- UZIN KE 2000 S
- UZIN KE 2428
- UZIN KE 49 HT
- UZIN KE 68
- UZIN KR 430
- UZIN KE 603
  - → An A2 trowel has been used. This works for all adhesives without any problems.

Additionally a test with a tackifier has been made (UZIN U 2100, underlay onto the substrate). This works surprisingly very well and could be an interesting alternative for the installer.

The long-term tests in the oven (8 weeks at 42 °C) showed that there aren't any problems concerning plasticizers with any of the adhesives.

The adhesives don't get soft or greasy.

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