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Technical Newsletter #23 1.0

Subject: Minimum criteria regarding adhesives to use

The goal of this technical newsletter is to review the minimum requirements for ensuring the long-term performance of adhesives used with specified Parquets Alexandra floors.

Users are responsible for ensuring that the adhesive they select meets the requirements mentioned below. Parquets Alexandra cannot be held responsible and makes no guarantee whatsoever with regards to:

1. The consistency of the adhesive's properties
2. The adhesive's chemical composition (VOCs, formaldehyde, or other products)
3. Issues with adhesive application or cleaning
4. The adhesive company's claim management process

When you select an adhesive, the manufacturer must guarantee in writing that the adhesive meets all the minimum criteria recommended by Parquets Alexandra. The adhesive manufacturer must also assume sole responsibility for meeting all criteria mentioned in this document.

Warranty exclusions are the following: any flooring deficiencies stemming from the application method or the adhesive itself, as adhesives can damage the finish under certain conditions.

Choosing the right adhesive is a critical step in ensuring the long-term integrity of your floor.

Criteria	Standard	Specification	Benefit if criteria is met
Water content		0%	To avoid water damage and not compromise installation
○ **Green grab**		Holds ridges High initial grab	To hold product on uneven subfloor To facilitate installation, avoid floor/board misalignment
□ **Shear strength**	**EN 14293**	72 psi (0.5 Mpa)	To ensure good bonding and performance
□ **Elongation at break**	**EN 14293** (modified)	Between 40 and 400%	To allow appropriate expansion
□ **Tensile strength**	**EN 14293**	90 psi (0.6 Mpa)	To ensure good bonding and performance
		or	
□ **Tensile strength**	**ASTM D-412** (method a)	72 psi (0.5 Mpa) (7-day cure)	To ensure good bonding and performance
□ **Elongation at break**	**ASTM D-412** (method a)	Between 40 and 400%	To allow appropriate expansion
□ **Creep of an assembly* (tensile or shear)**	**EN 14293** (modified) or Lap shear or Equivalent standard	Max. 1 mm elongation (at loading) 30 psi (0.2 Mpa) loading (30 min.) (7 day cured assembly)	To avoid buckling, excessive expansion, or performance problems To ensure long term performance/stress resistance
Adhesive transfer		> 80%	To ensure good bonding
		100%	If used as a vapor barrier, please see manufacturer instructions
○ **Curing time**		Max. 24 hrs	Excessively long cure times can lead to installation issues
Service temperature		20 to 110ºF (-6 to 43ºC)	To sustain variable temperature and radiant heat systems
Warranty		Lifetime	To match Mirage warranty

○ *= Impacted installation (time required and/or ease of installation)*

□ *= Properties that have an impact on product performance (expansion, cupping)*

*Assembly: typical wood or concrete floors (or similar to concrete)

Note: ASTM D-412 and EN 14293 do not necessarily correlate.

The following points can't be managed by Mirage but are critical when choosing an adhesive:

- *Spread rate (adhesive consumption)
- Underlay compatibility
- Subfloor compatibility
- Warranty exclusions
- Concrete sealer system: meets 3 lb./1,000. sq. ft /24 hrs
- Resistance to moisture/alkalinity (in concrete)
- Sealer/adhesive compatibility (refer to manufacturers)

**Note that the required spread rate for 3/4" or 9/16" thick hardwood floors is equivalent to the 1/2" thick. For 3/4" or 9/16" thick flooring installation, we recommend using the same trowel designed for 1/2" thick hardwood floors. Refer to glue manufacturer for trowel's recommendations & requirements according to 1/2" thick hardwood floors.* It is important to choose the trowel based on installation site characteristics such as subfloor flatness in order to obtain a minimal transfer of 80%, this criteria being predominant.

MIRAGE Technical Service Department
1-800-463-1303
technical@miragefloors.com