What is Natural Hydraulic Lime?

Lime comes basically in two forms: Hydrated and Hydraulic.

Hydrated Lime: This is the most commonly used and known lime. It comes in powder form, known as Lime Type S, or in a paste form, known as Lime Putty. Although it has wonderful physical and aesthetic qualities, hydrated lime has very strong limitations in the construction industry. Hydrated Lime sets only by carbonation (the re-absorption of CO^2) and thus, thicknesses are very limited. It is not suitable or practical for scratch or brown coats in a plaster, but can do wonders as a finish coat. The application requires very highly skilled labor and that special care must be taken to avoid physical harm, such as burns. Consequently, it becomes a specialty with associated costs.

Hydraulic Lime: Although basically of the same chemical composition as hydrated lime, hydraulic lime has its initial set with water, much like cement, and a second set by absorption of CO^2. This allows for simplicity of application although basic care is required, such as minimizing the amount of water, good sand and tarping, the cost of labor is comparable to normal stucco installation. Hydraulicity for St. Astier lime is achieved by the nature of the raw material.

Hydraulicity of Hydrated lime may be obtained by the addition of cement, pozzolanes, etc. In such a case, the introduction of foreign chemical elements may have immediate or long range inauspicious consequences and the sensitive user should stay away from these hybrid products.

	Purity (Blended Material)	Elasticity	Permeability (Vapor Exchange Quality)	Resistance to Salt	Suitable Compressive Strength	Self-Healing	Reworkable	Economic	Proficiency of Application	Resistance to Sulfate	Absence of Detrimental Chemicals	Slow Final Setting	Quick Initial Setting	Low Density
OPC Ordinary Portland Cement	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	YES	NO
Hydrated Lime	NO	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES & NO	YES	NO	YES
Lime Putties	YES & NO	YES	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES	NO	NO
NHL Natural Hydraulic Lime	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES