Supporting information – F. Gouny et al., Study of the effect of siliceous species in the formation of a geopolymer binder: understanding of reaction mechanisms between the binder, wood and earth brick.

Table S1. Characteristics of silica used (S_{BET}: specific surface area obtain by Brunauer Emmett and Teller (BET) method; D50: median diameter of silica and wt % SiO_2 the weight percentage of SiO_2)

	Si400	FDS	M5
S_{BET} (m^2/g)	1	40	202
D50 (µm)	12.00	0.30	0.14
wt % SiO_2	99.0	97.5 SiO_2 0.8 Si^0	99.8

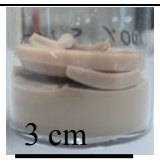
Table S2. Nomenclature of some samples studied

Series	Sample ID	M1000	Alkali silicate solution	Potassium hydroxide pellets	FDS	M5	Si400
(initial foam)	FDS_{100}	Same amount for all samples (Prud'homme [25])			100%	/	/
Substitution $FDS_XM5_{(100-X)}$	$FDS_{20}M5_{80}$				20%	80%	/
Variation $Si400_X$	$Si400_{60}$				/	/	60%

Table S3. Results of wettability test for Br_1, Br_2 and Wood in function of time

Wettability test			
t = 0			
t = 7 min			
Picture after 5 min			

Table S4. Picture of all synthesized samples

Substitution	FDS_0Si400_{100}	$FDS_{20}Si400_{80}$	$FDS_{40}Si400_{60}$	$FDS_{60}Si400_{40}$	$FDS_{80}Si400_{20}$
Picture					
Substitution	FDS_0M5_{100}	FDS_{20} $M5_{80}$	FDS_{40} $M5_{60}$	FDS_{60} $M5_{20}$	$FDS_{80}M5_{20}$
Picture					
Substitution	$Si400_0M5_{100}$	$Si400_{20}$ $M5_{80}$	$Si400_{40}$ $M5_{60}$	$Si400_{60}$ $M5_{20}$	$Si400_{80}M5_{20}$
Picture					
Variation	FDS_0	FDS_{20}	FDS_{40}	FDS_{60}	FDS_{80}
Picture					
Variation	$M5_{20}$	$M5_{40}$	$M5_{60}$	$M5_{80}$	$M5_{100}$
Picture					
Variation	$Si400_{20}$	$Si400_{40}$	$Si400_{60}$	$Si400_{80}$	$Si400_{100}$
Picture