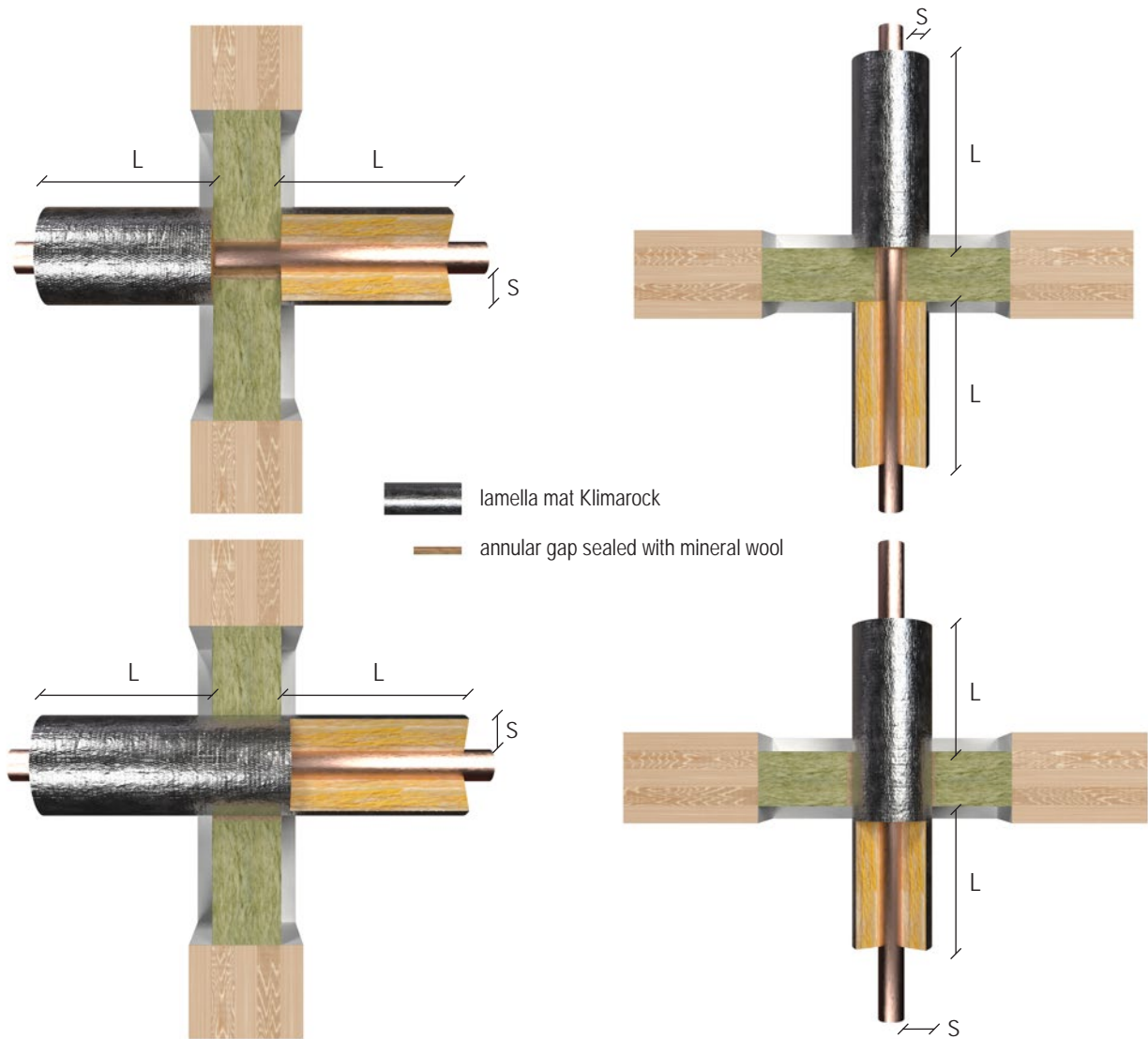


## Non-combustible pipes with lamella mat in wall and floor seals



All specifications in mm

Wall					
Pipe material	Outer diameter [mm]	Pipe wall thickness [mm]	Lamella mat		Fire resistance class
			Insulation length L (LS/LI) [mm]	Insulation thickness S [mm]	
<b>60 minutes</b>					
Copper, steel, stainless steel, cast iron	≤ 60.0	0.6–14.2	≥ 470 on both sides	30–100	EI 60 U/C
	≥ 60.0 – 88.9	0.6 / 2.0–14.2	≥ 720 on both sides		
Steel, stainless steel, cast iron	≥ 60.0 – < 114.3	0.6 / 2.8–14.2	≥ 470 on both sides		
	≥ 114.3 – < 219.1	2.8–14.2	≥ 470 on both sides		
		2.8 / 4.5–14.2	≥ 970 on both sides		
	219.1	4.5–14.2	≥ 970 on both sides		
<b>Multiple penetration</b>					
Up to three pipes made of copper, steel, stainless steel or cast iron	≤ 22.0	1.0–14.2	≥ 470 on both sides	30	EI 60 U/C

Floor					
Pipe material	Outer diameter [mm]	Pipe wall thickness [mm]	Lamella mat		Fire resistance class
			Insulation length L (LS/LI) [mm]	Insulation thickness S [mm]	
<b>60 minutes</b>					
Copper, steel, stainless steel, cast iron	≤ 15.0	0.8–14.2	≥ 220 on both sides	30–100	EI 60 U/C
	≥ 15.0 – ≤ 42.0	1.0–14.2	≥ 470 on both sides		
	≥ 42.0 – ≤ 88.9	1.0 / 2.0–14.2	≥ 970 on both sides		
Steel, stainless steel, cast iron	≥ 159.0 – ≤ 219.1	3.6 / 4.0–14.2	≥ 970 on both sides		
<b>45 minutes</b>					
Copper, steel, stainless steel, cast iron	≤ 15.0	0.6–14.2	≥ 220 on both sides	30–100	EI 45 U/C
	≥ 15.0 – ≤ 60.0	0.6–14.2	≥ 470 on both sides		
	≥ 60.0 – ≤ 88.9	0.6 / 2.0–14.2	≥ 720 on both sides		
<b>Multiple penetration</b>					
Up to three pipes made of copper, steel, stainless steel or cast iron	≤ 22.0	1.0–14.2	≥ 425 on both sides	30	EI 45 U/C / E 60 U/C

