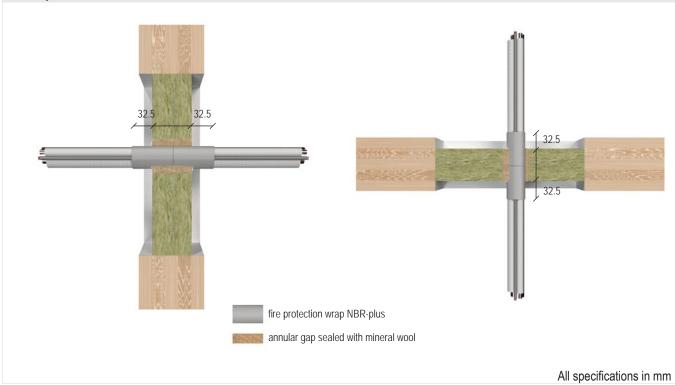
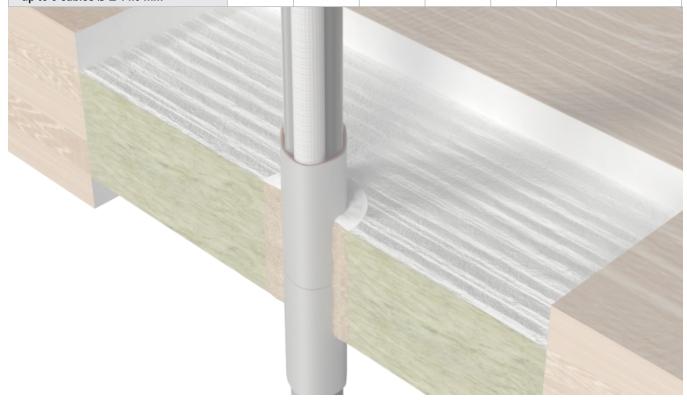
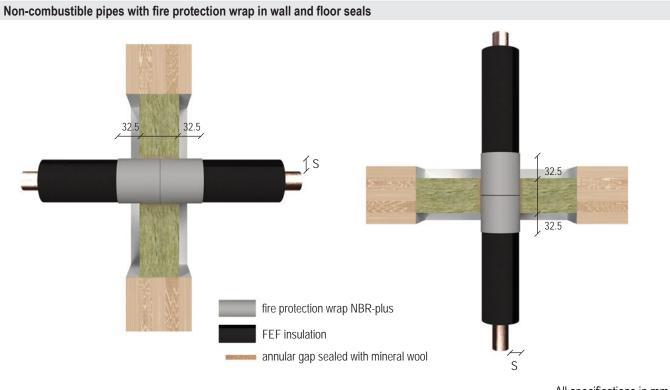
## HVAC split line combinations in wall and floor seals



Wall/floor							
Services	Wrap width [mm]	Overlap [mm]	Inside seal [mm]	Outside seal [mm]	Number of layers [n]	Fire resistance class	
up to 2 copper pipes $\emptyset \le 18.0$ mm, pipe wall thickness 1.0–14.2 mm, 9 mm PE foam, + 1 pipe PVC-U/PVC-C $\emptyset \le 25.0$ mm, pipe wall thickness 1.5 mm, + up to 3 cables $\emptyset \le 14.0$ mm	2 × 62.5 or 1 × 125	0	2 × 30 or 1 × 60	2 × 32.5	2	EI 60	





All specifications in mm

Wall																					
		Pipe wall thickness [mm]	Section insulation		Protective insulation																
	Outer diameter [mm]			Insulation thickness [mm]	Insu- lation length [mm]	Insu- lation thick- ness [mm]	Wrap width [mm]	Overlap [mm]	Inside seal [mm]	Outside seal [mm]	Number of layers [n]	Fire resistance class									
60 minutes	;																				
	≤ 15.0	0.6–14.2	0 00	10.0– 38.0	_	_	2 × 62.5 or 1 × 125		2 × 30 or 1 × 60	2 × 32.5	2	EI 60 U/C									
Copper, steel, stainless	≤ 42.0			12.0– 38.0	_	-		0			2										
steel, cast iron	≤ 60.0			19.0– 38.0	_	-					2										
cast non	≤ 88.9			22.5– 38.0	_	-					2										
	≤ 88.9		CS	15.5– 38.0	_	_		0			2										
Steel, stainless	≤ 114.3			15.0– 38.0	_	_					2										
steel, cast iron	≤ 159.0			25.0– 38.0	250.0	19.0					2										
	≤ 219.1													25.0– 38.0	250.0	38.0					2

Wall																			
			Section insulation		Prote														
Pipe dia	Outer diameter [mm]	Pipe wall thickness [mm]	Insu-	Insulation thickness [mm]	Insu- lation length [mm]	Insu- lation thick- ness [mm]	Wrap width [mm]	Overlap [mm]	Inside seal [mm]	Outside seal [mm]	Number of layers [n]	Fire resistance class							
30 minutes	;			<u> </u>			1			1	<u> </u>								
Copper, steel, stainless	≤ 42.0	0.6–14.2	CS	10.0- 38.0	_	_	2 × 62.5 or	0	2 × 30 or	2 × 32.5	2	EI 30 U/0							
steel, cast iron	≤ 88.9			18.0– 38.0	-	_	1 × 125		1 × 60		2								
Floor																			
			ing	ection sulation		ective lation			NBR-plu	S									
Pipe material	Outer diamete [mm]	Pipe wal thick- ness [mm]	l Insu- lation length			Insu- lation thick- ness [mm]	Wrap width [mm]	Overlap [mm]	Inside seal [mm]	Outside seal [mm]	Number of layers [n]	Fire resistanc class							
60 minutes	;								I										
<b>.</b>	≤ 15.0			10.0–38.0	-	-					2								
Copper, steel,	≤ 42.0	-	-	-	•						12.0–38.0	-	-					2	
stainless steel, cast iron	> 42.0 ≤ 88.9						19.0	-	-					2					
astiion	≤ 88.9	0.6–14.2		22.5–38.0	-	-					2								
	≤ 15.0			00	00	10.0–38.0	-	-	2 × 62.5		2 × 30	0.005	2						
	≤ 42.0	-	_		_					CS	15.0–38.0	-	-	or 1 × 125	0	or 1 × 60	2 × 32.5	2	EI 60 U/0
Steel, stainless	≤ 88.9	)		18.5–38.0	_	-					2								
steel, cast iron	≤ 114.3	3 3.2–14.2	.2	18.5–38.0	_	-					2								
	≤ 159.0	0 4.0-14.2	2	25.0–38.0	250	19	-				2								
	≤ 219.	1 4.5–14.2	2	25.0–38.0	250	38					2								
30 minutes	;																		
Copper, steel, stainless	≤ 42.0	0.6–14.2	2 CS	10.0–38.0	-	-	2 × 62.5 oder	0	2 × 30 or	2 × 32.5	2	EI 30 U/C							
steel, cast iron	≤ 88.9			19.0–38.0	-	-	1 × 125		1 × 60		2								

cast iron

## Son-combustible pipes with PIR insulation and fire protection wrap in wall and floor seals

Wall									
Pipe material	Outer diameter [mm]	Pipe wall thickness [mm]	PIR insulation		<b>F</b> *				
			Thickness S [mm]	Wrap width [mm]	Number of layers [n]	Overlap [mm]	Inside seal [mm]	Outside seal [mm]	Fire resistance class
60 minutes									
Copper, steel,	≤ 15.0	0.0.44.0	20–80						
stainless steel,	> 15 – ≤ 88.9	0.6–14.2	30–80		2	0	2 × 30 or 1 × 60	2 × 32.5	EI 60 U/C
cast iron	108.0	2.5–14.2	40-80	0 ~ 60 5					
	≤ 15.0	0.6–14.2	20–80	2 × 62.5 or 1 × 125					
Steel,	> 15.0 - ≤ 88.9		30–80						
stainless steel,	> 88.9 - ≤ 108.0	2.5–14.2 4.0–14.2	40-80						
cast iron	$> 108.0 - \le 168.3$		40-00						
	> 168.3 – ≤ 219.1	4.5–14.2	50						
45 minutes									
Copper, steel,	≤ 42.0	0.6–14.2	20–80						EI 45 U/C
stainless steel,	> 42 – ≤ 88.9	0.0-14.2	30–80						
cast iron	108.0	2.5–14.2	50	0 4 60 5			0 × 20		
	≤ 42.0	06 14 0	20-80	2 × 62.5 or	2	0	2 × 30 or	2 × 32.5	
Steel, stainless steel,	> 42.0 - ≤ 88.9	0.6–14.2		1 × 125	2	0	1 × 60	2 ^ 32.3	
	> 88.9 - ≤ 108.0	2.5–14.2	30–80						
cast iron	$> 108.0 - \le 168.3$	4.0–14.2							
	$> 168.3 - \le 219.1$	4.5–14.2	50						

Wall									
Pipe material	Outer diameter [mm]	Pipe wall thickness [mm]	PIR insulation		Fine				
			Thickness S [mm]	Wrap width [mm]	Number of layers [n]	Overlap [mm]	Inside seal [mm]	Outside seal [mm]	Fire resistance class
30 minutes									
Copper, steel, stainless	≤ 88.9	0.6–14.2	20–80			0	2 × 30 or 1 × 60	2 × 32.5	EI 30 U/C
steel, cast iron	108.0	2.5–14.2	30–80	2 × 62.5					
Steel,	≤ 88.9	0.6–14.2	20-80	or	2				
stainless	> 88.9 - ≤ 108.0	2.5–14.2	20	1 × 125					
steel, cast iron	> 108.0 - ≤ 168.3	4.0-14.2	30	_					
	> 168.3 – ≤ 219.1	4.5-14.2	50						

Floor									
Pipe material	Outer diameter [mm]	Pipe wall thickness [mm]	PIR insulation						
			Thickness S [mm]	Wrap width [mm]	Number of layers [n]	Overlap [mm]	Inside seal [mm]	Outside seal [mm]	Fire resistance class
60 minutes									
Copper, steel,	≤ 15.0	0.0.44.0	20–80						
stainless steel,	> 15 - < 88.9	0.6–14.2	20.00		2	0	2 × 30 or 1 × 60	2 × 32.5	EI 60 U/C
cast iron	> 88.9 - ≤ 108.0	2.5–14.2	30–80	2 × 62.5 or 1 × 125					
	≤ 15.0	0.6–14.2	20–80						
Steel,	> 15.0 - ≤ 88.9		30–80						
stainless steel,	> 88.9 - ≤ 108.0	2.5–14.2							
cast iron	> 108.0 - ≤ 168.3	4.0-14.2							
	> 168.3 - ≤ 219.1	4.5–14.2	100						
45 minutes									
Copper, steel,	≤ 42.0	0.6–14.2	20–80	2 × 62.5		0	2 × 30		
stainless steel,	> 42 – ≤ 88.9	0.0-14.2	20.00	or	2		or	2 × 32.5	EI 45 U/C
cast iron	> 88.9 - ≤ 108.0	2.5–14.2	30–80	1 × 125			1 × 60		
30 minutes									
Copper, steel, stainless	≤ 88.9	0.6	20–80	2 × 62.5	0	0	2 × 30	2 × 32.5	EI 30 U/C
steel, cast iron	> 88.9 - ≤ 108.0	2.5–14.2	30–80	or 1 × 125	2		or 1 × 60	2 × 32.5	