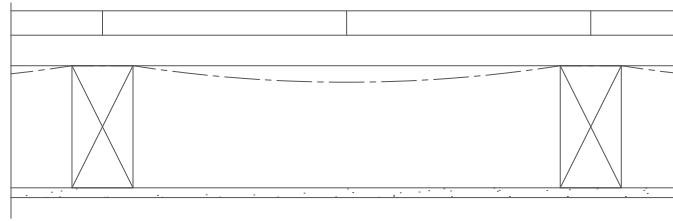


# NBT Retrofit Internal Roof Insulation Solutions

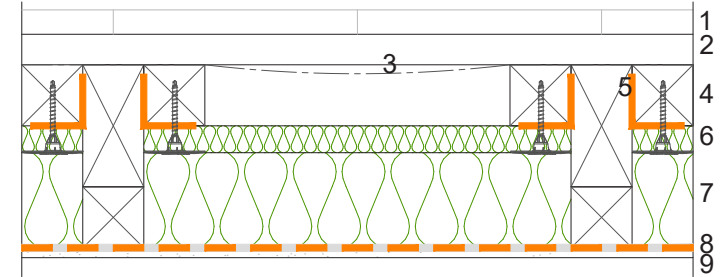
## For 100mm or more Rafter Depth

The system complies with the most stringent of standards – from baseline building regulations through to Passivhaus. The system is suitable for most internal finishing options including lime plaster, clay plaster or plaster board finish. All components for the system are available from NBT

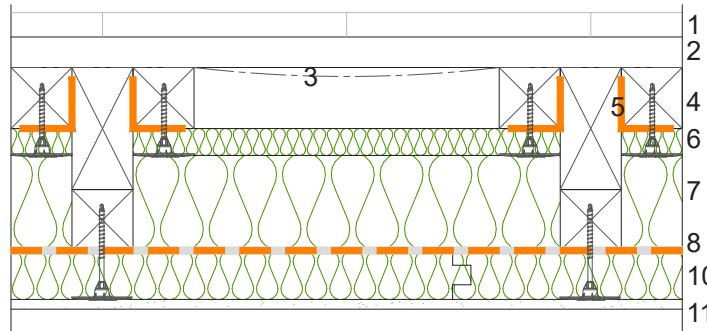
### EXISTING ROOF



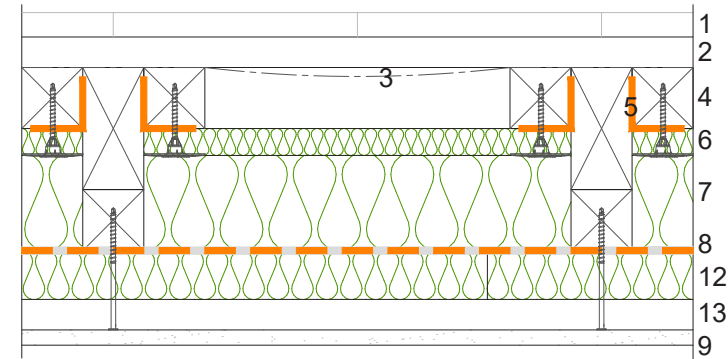
### OPTION 3



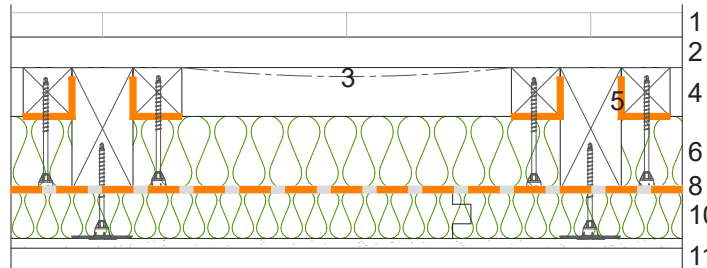
### OPTION 1a



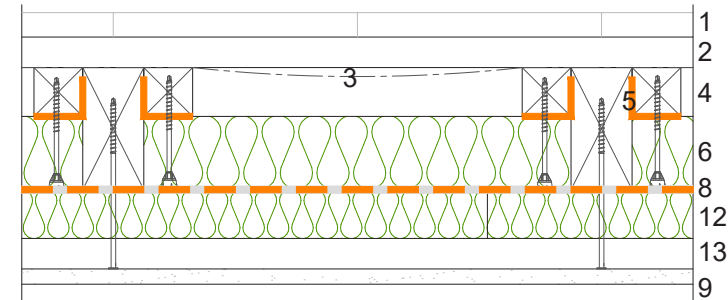
### OPTION 1b



### OPTION 2a



### OPTION 2b



## KEY TO COMPONENTS

1. Existing Roof Tile
2. Existing Tile Batten or Sarking ply
3. Existing Bitumen or similar felt
4. New 50mm batten fixed on either side of existing rafter to create ventilation gap.
5. PAVATEX PAVACOLL Water Proof Glue
6. 20mm PAVATEX ISOROOF (cut to fit) or 35mm PAVATEX ISOROOF or 60, 80, 100mm PAVATEX PAVATHERM-PLUS
7. PAVATEX PAVAFLEX between newly created space with extra batten. Pavaflex is available in 50, 80, 100 and 140mm in 375 & 575 width to suit 400 & 600 centres respectively
8. PAVATEX DB 3.5 airtight membrane
9. Standard Plaster Board
10. PAVATEX PAVATHERM COMBI T&G boards. Available in 40, 60, 80, 100 & 120mm.
11. 8mm BAUMIT plaster coat (meshed)
12. PAVATEX PAVATHERM square edge board. Available in 40-140mm in the increment of 20mm.
13. New batten to be installed coinciding with Pavatherm board joints running perpendicular to existing rafter.

OPTION 1a	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses
ISOROOF	20	20	20	20	35	35	35	35
PAVAFLEX	50	50	80	80	50	50	80	80
PAVATHERM COMBI	40	60	40	60	40	60	40	60
<b>U-VALUE</b>	<b>0.36</b>	<b>0.31</b>	<b>0.29</b>	<b>0.26</b>	<b>0.33</b>	<b>0.29</b>	<b>0.27</b>	<b>0.24</b>

OPTION 1b	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses
ISOROOF	20	20	20	20	35	35	35	35
PAVAFLEX	50	50	80	80	50	50	80	80
PAVATHERM	40	60	40	60	40	60	40	60
<b>U-VALUE</b>	<b>0.33</b>	<b>0.28</b>	<b>0.27</b>	<b>0.24</b>	<b>0.30</b>	<b>0.26</b>	<b>0.25</b>	<b>0.22</b>

OPTION 2a	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses
PAVATHERM-PLUS	60	60	80	80
PAVATHERM COMBI	40	60	40	60
<b>U-VALUE</b>	<b>0.42</b>	<b>0.34</b>	<b>0.36</b>	<b>0.30</b>

OPTION 2a	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses
PAVATHERM-PLUS	60	60	80	80
PAVATHERM	40	60	40	60
<b>U-VALUE</b>	<b>0.37</b>	<b>0.31</b>	<b>0.32</b>	<b>0.27</b>

OPTION 3	Thick-nesses	Thick-nesses	Thick-nesses	Thick-nesses
ISOROOF	20	20	35	35
PAVAFLEX	50	80	50	80
<b>U-VALUE</b>	<b>0.58</b>	<b>0.42</b>	<b>0.49</b>	<b>0.37</b>