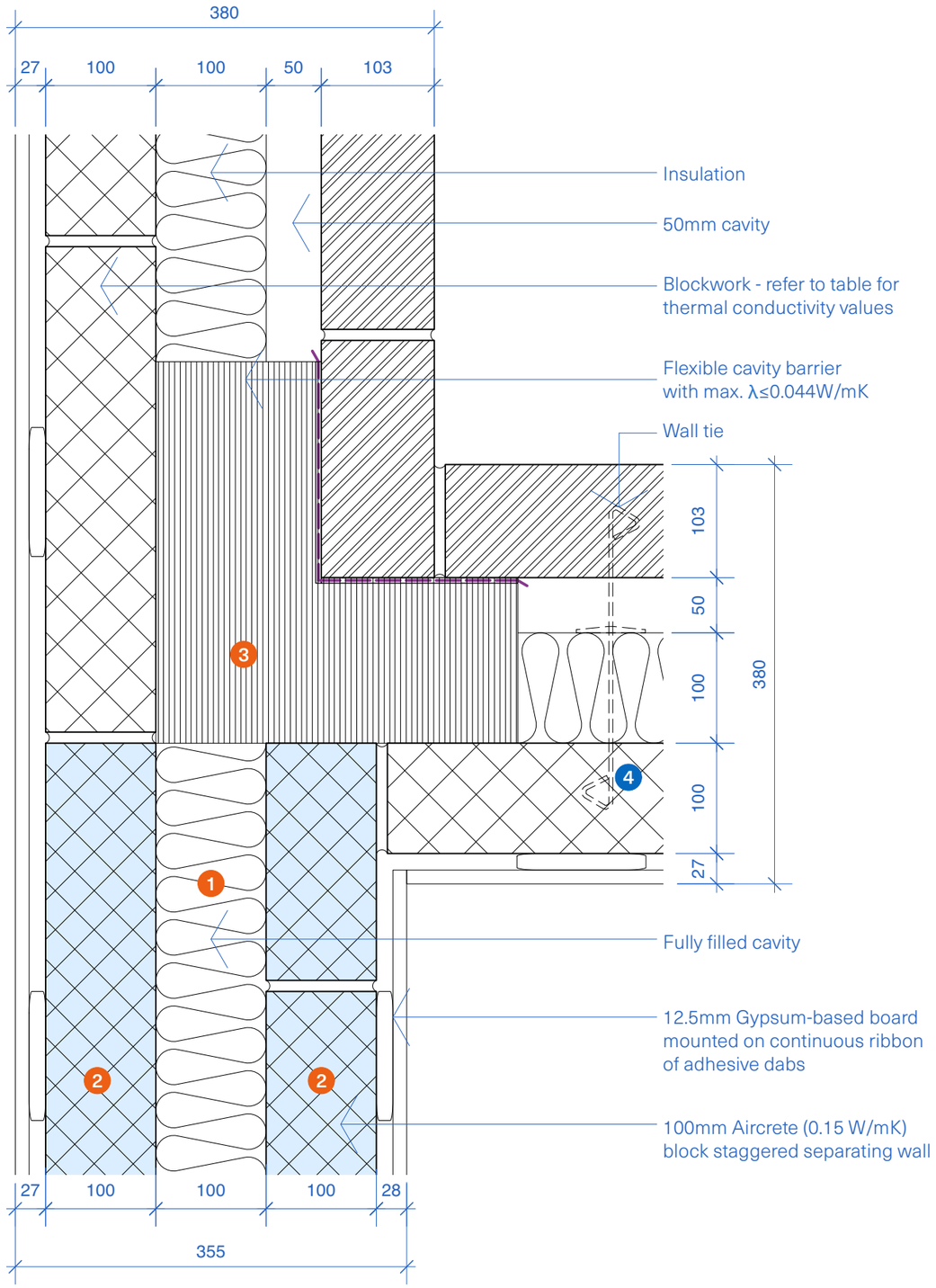
Construction Detail



Calculated Ψ (Psi) value for use in SAP Calculation

	Internal leaf block thermal conductivity (W/mK)					
Insulation thermal conductivity (W/mK)	0.11	0.15	0.19	0.28	0.6	1.33
0.019	**0.029**	**0.030**	**0.030**	**0.031**	**0.032**	**0.032**
0.022	**0.029**	**0.030**	**0.031**	**0.031**	**0.032**	**0.032**

f-values: 0.967 - 0.978 (values above 0.75 indicate low risk of condensation and mould)
The above Psi values are applicable per dwelling on either side of the party wall.

Ψ (Psi) value Thermal Compliance Notes

1. 100mm Cavity fully filled with insulation (0.036 W/mK).
2. 2 x 100mm Aircrete (0.15 W/mK) block staggered separating wall.
3. Close the external wall cavity with flexible cavity barrier with max. λ≤0.044W/mK.
   Ensure that the cavity barrier fits accurately as there could be the potential for a gap to form behind the external brick leaf at the 90° angle.
   Dependent on the type of cavity barrier used, a DPC should be provided to prevent the barrier absorbing moisture.
   Horizontal/vertical cavity barriers need to be fixed in accordance with manufacturers guidelines.
   If fixing spikes are used, they should be installed at the required centres.
   For compression fit cavity barriers, use the correct size for a compressive fit in the cavity.

Construction Notes

4. Type A (part E) wall ties at no more than 2.5 ties/m2 (900 x 450mm spacing).
   Wall ties: no greater than 900mm horizontal spacing.