

## Key features of the Victorian Terrace Retrofit Project:

### Heating and hot water systems

- Air source heat pumps
- Solar thermal
- Mechanical ventilation with heat recovery system
- Gas boiler with flue-save

### Floor and wall insulation (internal & external):

- Aerogel; a very thin but highly effective insulation material, first used by NASA for use in spacesuits – an innovative thin insulation solution.
- Sheep's wool
- Expanded polystyrene
- Extruded polystyrene
- Glass wool
- PIR
- Polyurethane foam
- Phenolic Foam
- Acoustic insulation

### Windows:

- Reconditioned timber sash windows fitted with very thin evacuated double glazing by Pilkington
- Triple glazed composite
- Timber double glazed sash replacements
- PVCu double glazed sash replacements
- Velux tripled glazed rooflights
- Innovative prototypes

### Climate change mitigation materials:

- Phase change material ceiling tiles – introducing thermal mass to reduce the need for mechanical cooling