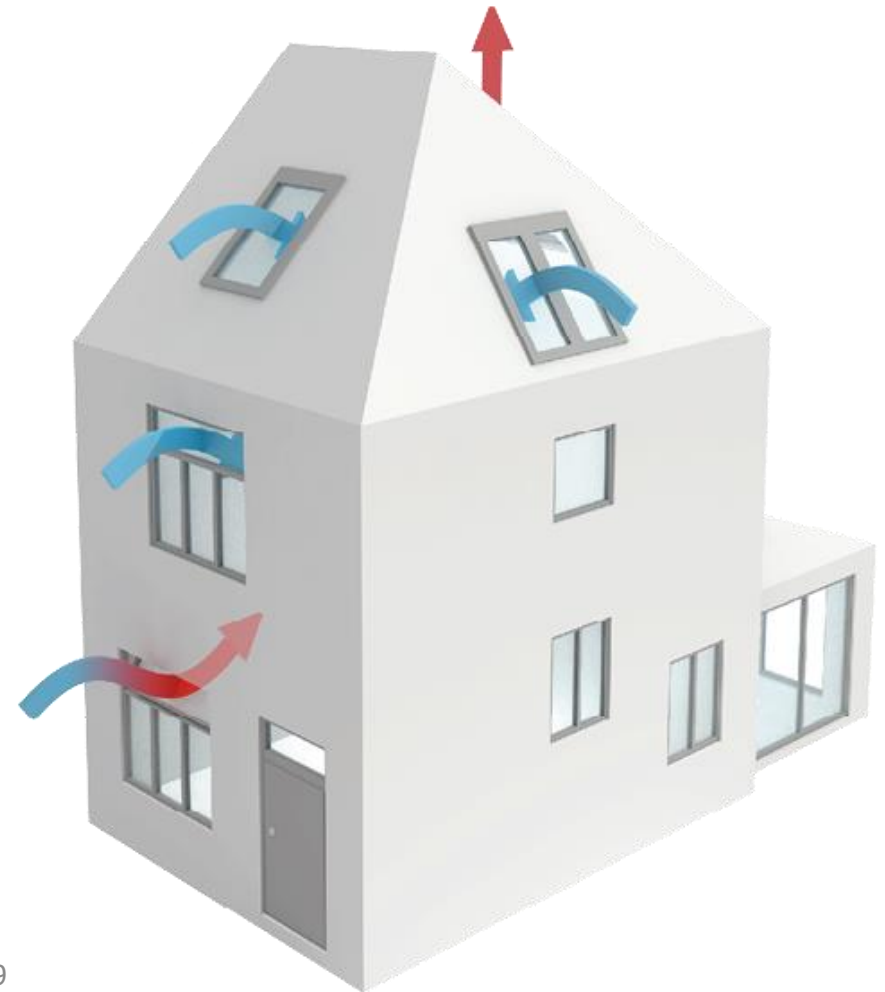


Part II: Replicability



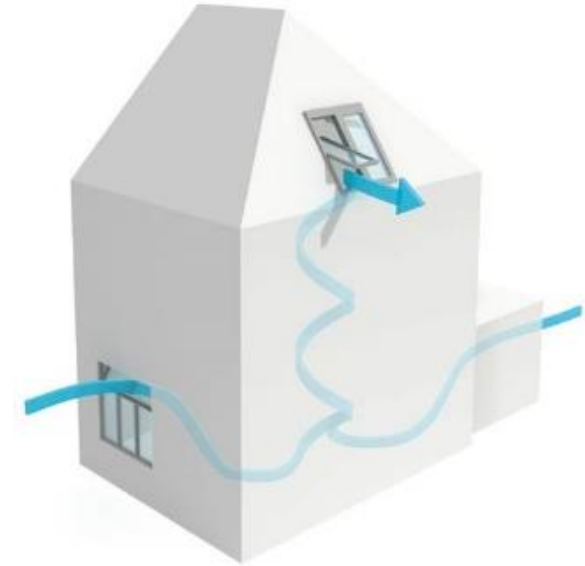
Hygienic Ventilation System

- (Demand controlled)
- (With heat recovery)
- Accessible components for good maintenance
- Well-designed as to avoid noise and draught complaints
- Commissioning to detect initial technical failures and quality of workmanship
- RenovActive: Natural supply vents with mechanical extraction



Natural Peak Ventilation

- (Automatically controlled)
- Cross and stack ventilation
- Automatic control considers CO_2 -level, (daily average) outdoor temperature, indoor temperature, wind speed and rain
- RenovActive: through pivoting windows



Exterior Solar Shading

- (Automatically controlled)
- Strongly recommended on all roof windows
- Should not block the air flow through supply vents



Monitoring

- Netatmo + raspberry Pi + emonpi
- Temperature
- Indoor air quality:
 - CO₂-concentration
 - Relative humidity
- Door opening
- Electricity, water, gas



Replicability: Main conclusions

- Overall project demonstrated robustness: comfort and indoor air quality parameters are met
- It would make sense to allow occupants to define their priority in a system (e.g. security)
- System should be able to switch back to automatic setting; you should allow override, but system should kick in again at some point
- For social housing, costs of unhealthy inhabitants much higher for society than costs of the system – it also has an impact on the maintenance costs