



INDOOR
ENVIRONMENT
SPECIALISTS



PVHR™
Purge Ventilation with
Heat Recovery

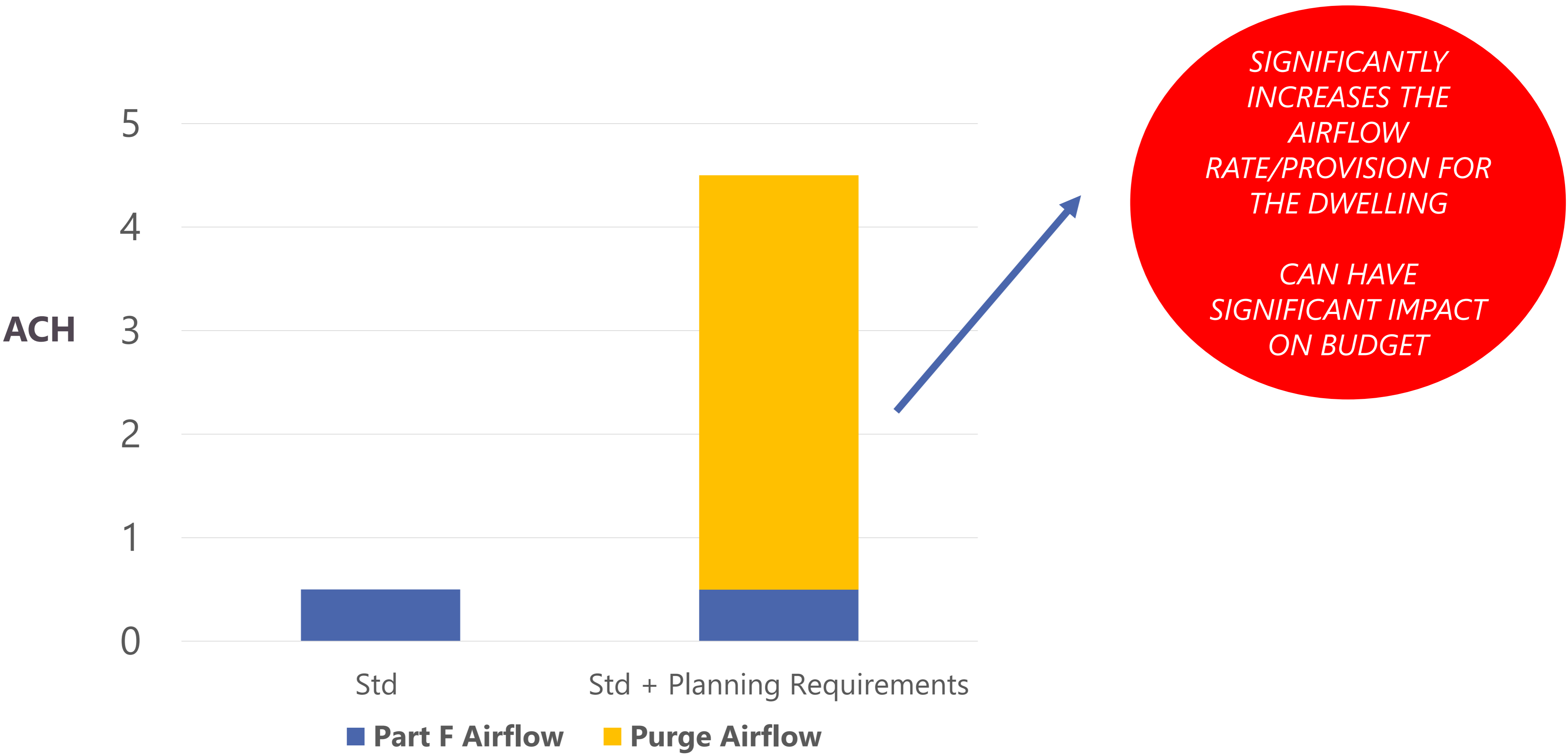
WHY IS THERE AN INCREASED NEED FOR PURGE?

Purge is driven by additional planning requirements around 3 key areas;

- Noise/Acoustics
- Overheating
- AQMA
- The above requirements impact the ability to use the window for 'purge' ventilation as required in Part F OF Building Regulations
- The additional PURGE Ventilation Rates can add to 2-4ACH+ depending on requirements



HOW DOES PURGE IMPACT OVERALL PERFORMANCE?



HOW DOES THIS IMPACT THE VENT DESIGN & COST?



WHAT ARE THE KEY DESIGN AND BUILDING REGULATION REQUIREMENTS?

1. Deliver the Whole House Rates (extract and supply) as detailed in ADF Building Regulations (usually via MVHR Heat Recovery)
2. Deliver the Intermittent Purge Rates in habitable rooms (extract) as detailed in ADF Building Regulations and planning restriction
3. **Provide a balanced supply and extract system (probably the most important design driver)**

when the PURGE rate/fan extract is activated, the supply air must increase/provide the same air volume to avoid negative pressure within the dwelling

STRATEGIES & COSTS

TYPICAL CONSULTANT SPEC	PVHR™ FROM HRV
<p>Commercial Approach - Large MVHR Unit requiring large diameter ducting (450mm x 150mm) to deliver total airflow (ADF + Purge) and continuous balanced system</p>	<p>Standard sized units and ducting (220 x 90/204 x 60mm) with simple controllability, energy efficient performance and low noise levels</p>
<p>Considerations;</p> <ul style="list-style-type: none"> • Void space for ducting • Location of large unit • Noise – further insulation? 	<p>Considerations:</p> <ul style="list-style-type: none"> • Local/Room installation requirement
<p>Est Cost Per Plot: £7000* <small>Based on units & install</small></p>	<p>Est Cost Per Plot £2950* <small>Based on units & install</small></p>
<p>Saving of £4050 per plot</p>	

**WANT TO KNOW MORE ABOUT
PVHR™ FROM HRV GROUP?**





PVHR Case Study

- 97 New Build Apartments
- Part F Whole Building Ventilation Rates
- Planning Requirement: Purge ventilation (intermittent) due to non-openable windows and acoustic issues
- **£400K Saving with HRV PVHR strategy v's original consultation specification**

We've already been delivering our PVHR strategy directly for a number of clients, helping reduce budgets and meet planning restrictions without issue.

This is just one project which we'd be happy to talk to you about.



WE ARE HRV GROUP

We are specialists in the indoor environment

- Ventilation & Climate Control Solutions
- System Design & Installation
- System Servicing & Maintenance
- Mould & Condensation Investigation
- Indoor Air Quality Monitoring
- Independent Commissioning
- Bespoke Metal Fabrication
- Installer Training





Do you have complex requirements such as overheating and purge?

Can we help assist with your ventilation and/or air con/cooling package requirements?



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