 SCC Developments - general requirements for futureproofed approach

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| **Element**  | **Comment**  | **Rationale** | **Developer response**  |
| Window size  | Use Thermal modelling and daylight software/ part L dynamic modelling for overheating.  | Southern elevations may require brise Soleil, west and east elevations may require vertical shading  |  |
| Window detailing  | Window junctions to be designed without thermal bridging  | In line with insulation layer. Fabric first approach  |  |
| Window film  | To be avoided as overheating strategy  | The film helps with heat gain during summer but some heat gain during winter is useful  |  |
| Balcony design/ canopies  | Freestanding structures preferred vs. cantilevered. Large metal fixings also to be avoided.  | Avoid thermal bridging in line with ‘fabric first approach’  |  |
| Air Tightness  | As low as possible  | In order to be in line with fabric first approach we need good air tightness close to 1m3/ (h.m2)@50 Pa |  |
| Bays & Dormers | Houses, avoid bay windows and dormers if possible | Avoid thermal bridging and heat loss |  |
| MHVR ventilation  | Strategy to be considered regarding mechanical ventilation  | Consider strategy of MVHR types if terminals will be visible on elevations  |  |
| u-values  | See SCC Energy Guidance for new developments 2021-2025 which can be found here [Sustainability checklist (southampton.gov.uk)](https://www.southampton.gov.uk/sustainability) | Fabric First approach  |  |
| Passivhaus  | Consider uplift to full passivehaus standards on suitable plots with good orientation and form  | To avoid retrofitting in future  |  |
| Heating Strategy  | Futureproofing of services should be considered (for example oversizing of radiators ready for a heatpump)  | Futureproofing  |  |
| Roof Orientations  | Size and position to maximise solar panel potential | Allow for maximum renewable energy generation.  |  |
| Water Use  | Maximum 100 l/p/d internal water use, rainwater harvesting.  | Reduce water resource pressures  |  |
| Green Infrastructure  | Maximise use of Green Infrastructure such a green roofs  | Biodiversity, climate adaptation and resilience  |  |