

The Benefits of “Smart Construction”

- *could accelerating the
construction of specialist
housing be one ?*

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Programme Lead- Retirement Solutions



Smart – Offsite & MMC



Types of MMC

5. Site-based MMC
Innovative methods of construction used on-site. They include thin joint blockwork and insulated formwork.



1. Volumetric construction
Three-dimensional units which are fully fitted out off-site.



2. Pods
Pods are used in conjunction with another construction method. Examples are bathroom or kitchen pods.

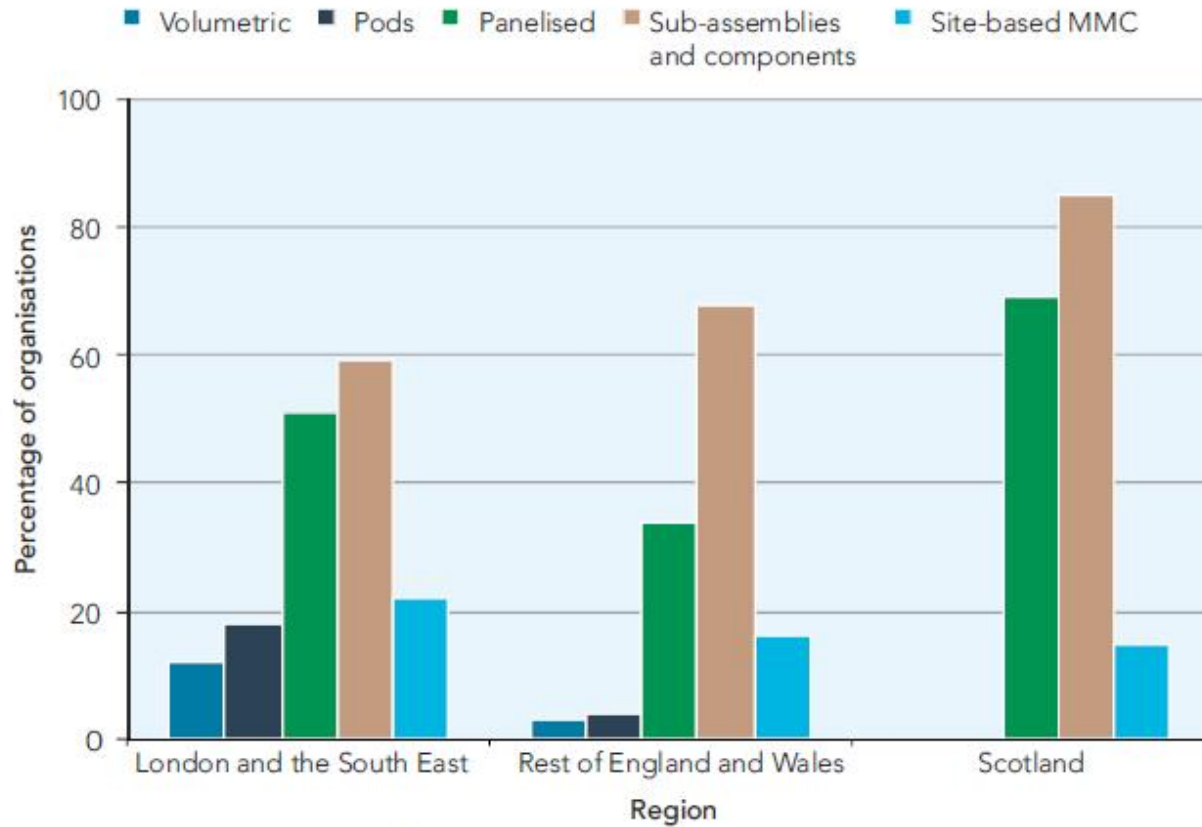


4. Sub-assemblies and components
Larger components incorporated into new homes. They include roof and floor cassettes, prefabricated chimneys, porches and dormers, and I-beams.



3. Panelised systems
Panels with timber or light steel framing, structural insulated panels (SIPS) or cross-laminated timber (CLT).

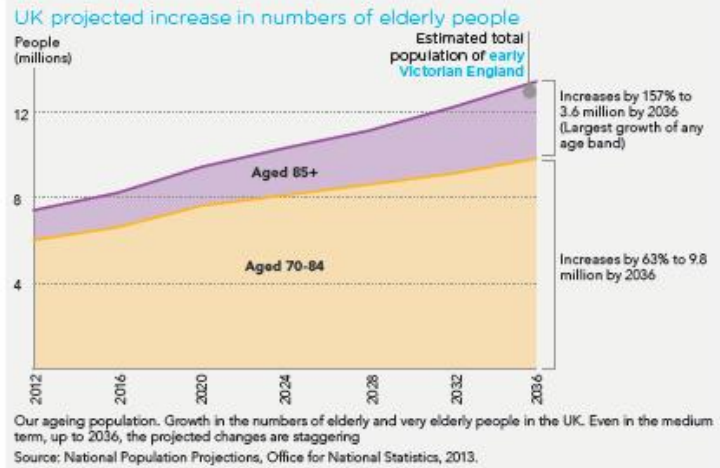
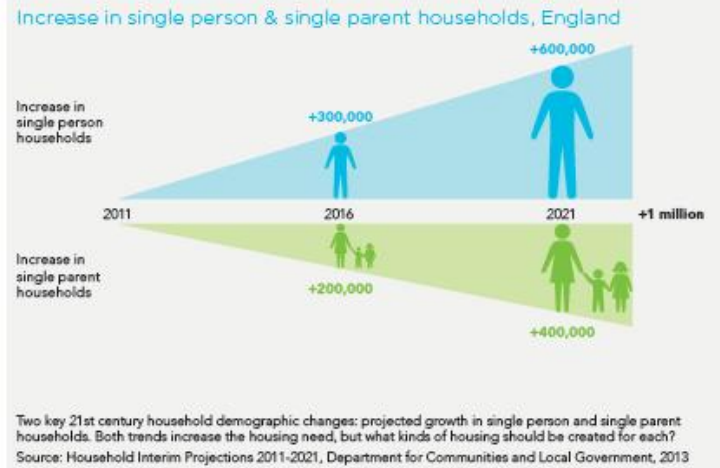
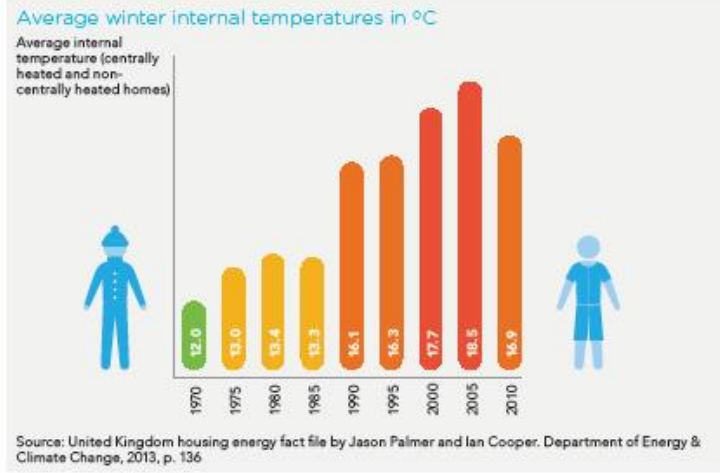




Base: London and the South East (49), Rest of England and Wales (73), Scotland (13).

Figure 7 Percentage of organisations using MMC at least once in 2015, by region





Why is this relevant to people over 55

Smart Construction - Offsite - MMC

Keepmoat have built most systems: all with advantages and disadvantages:

- *Volumetric or Modular (timber frame, lightweight steel, pods)*
- *Panelised (timber frame, CLT, SIPS, concrete, steel frame)*
- *Thin bed/single skin, insulated concrete formwork*



Thin bed, single skin



Panelised: SIPS



Panelised: Concrete panel



Panelised: Steel Frame

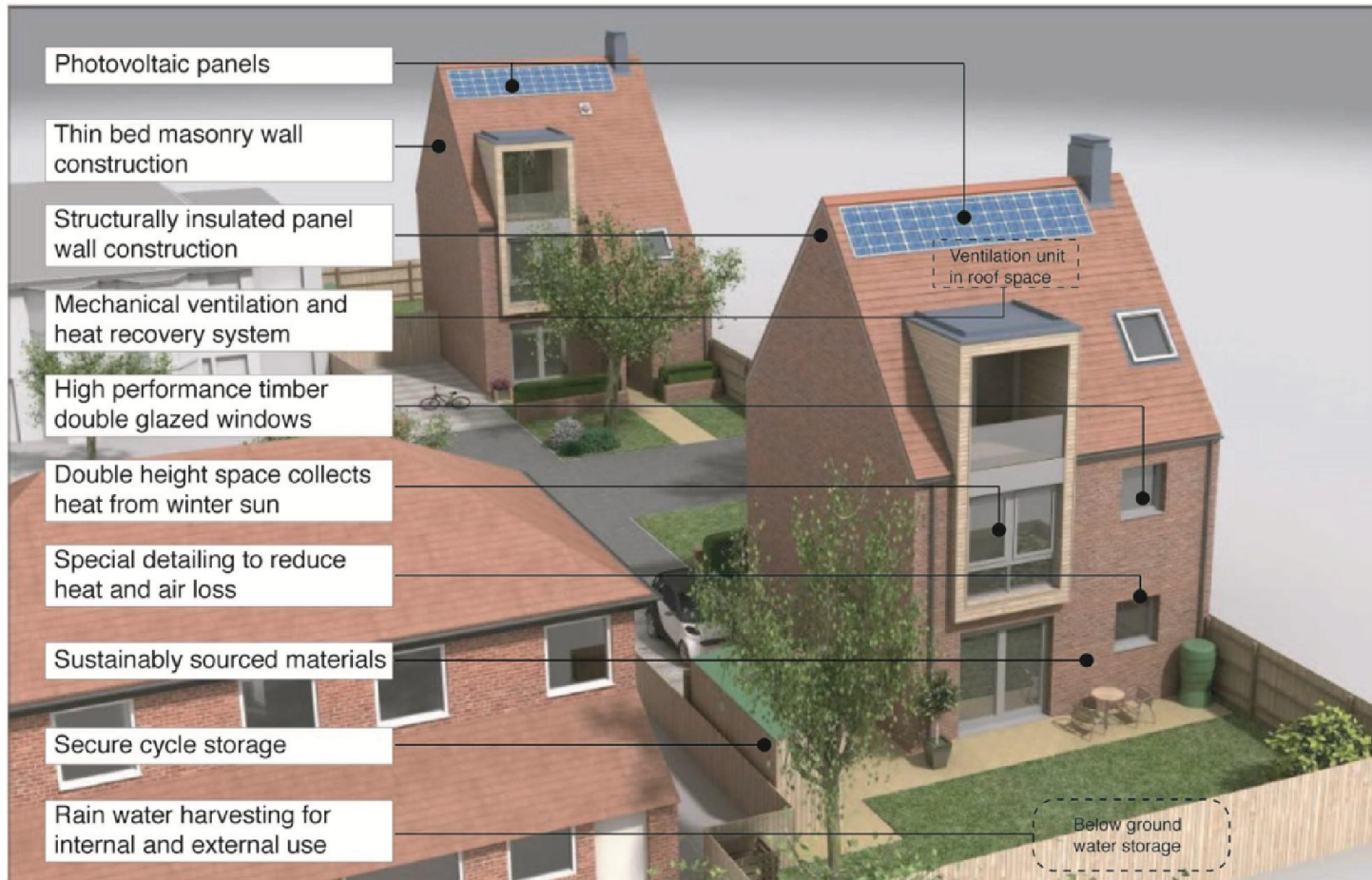


Modular: Keepmoat have had our own factory before...



and pioneered high performing housing...





But...



Some people have natural concerns...

MailOnline



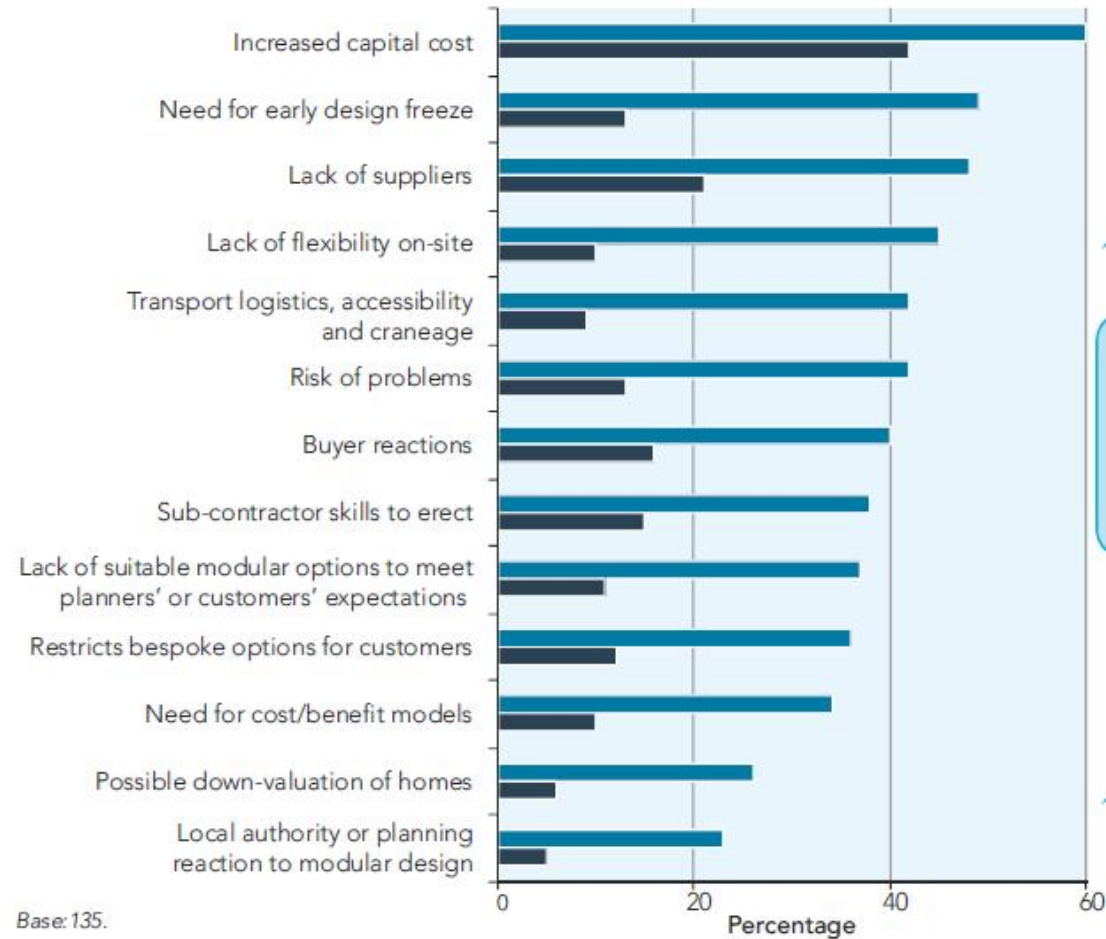
Ministers are planning a new wave of 100,000 prefab 'modular homes' in attempt solve the housing crisis



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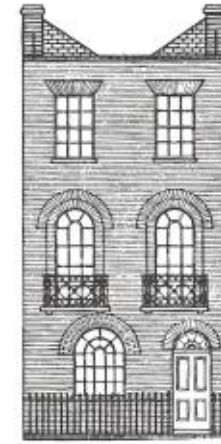
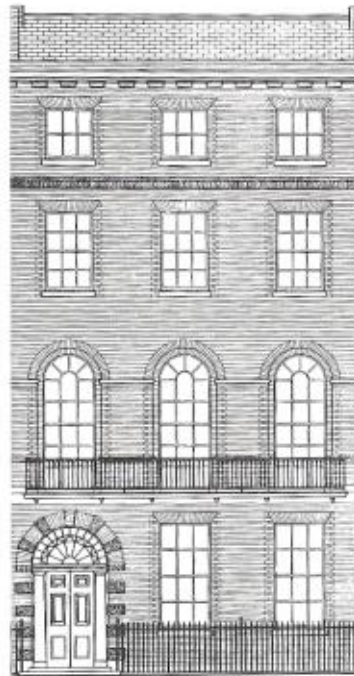
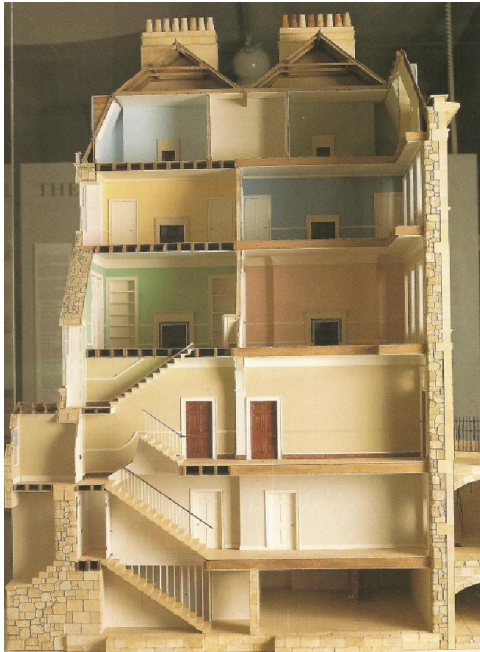
What are some of the Issues associated with Offsite



But... Some of the most beautiful streets...



... are boxes behind a beautiful façade





 **Keepmoat**





3 BED END 3 BED 3 BED 3 BED

Evolve house types - Streetscape 1



3 BED 2 BED 3 BED 2 BED 3 BED 2 BED

Evolve house types - Streetscape 6 - Georgian (seaside render) - 2/3 bed terrace



3 BED 2 BED 3 BED 2 BED 3 BED

Evolve house types - Streetscape 5 - Georgian Regency - 2/3 bed terrace

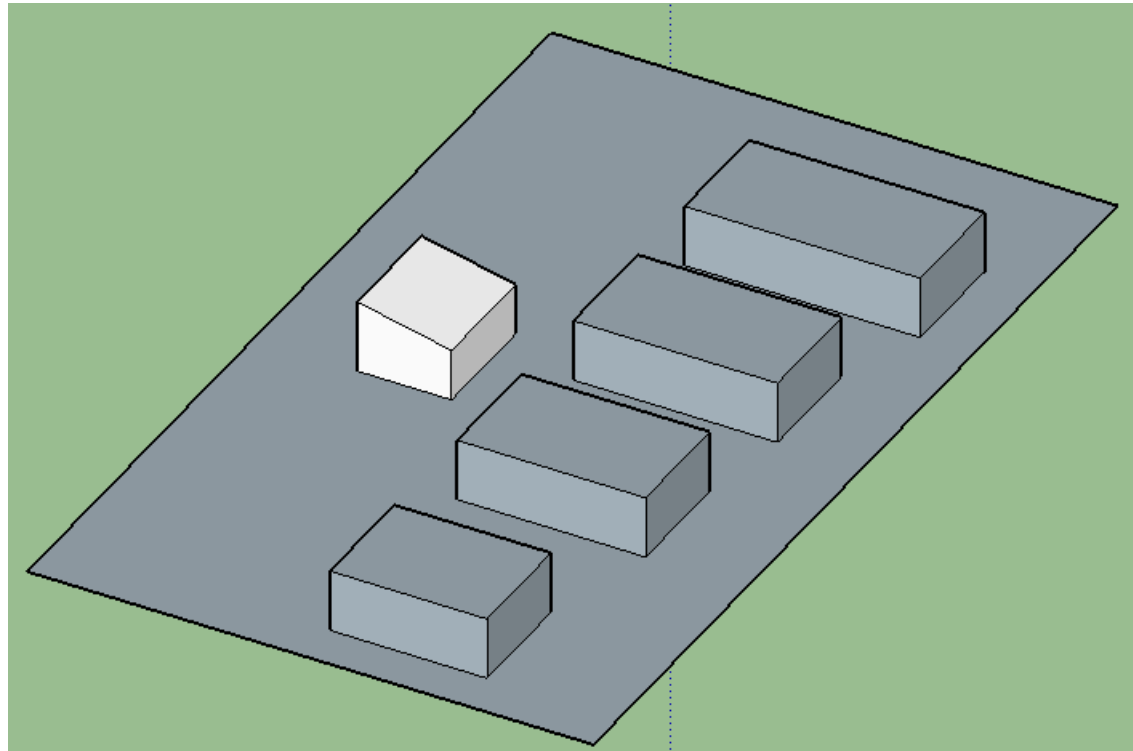


2 BED PAIRS 2 BED divide 3 BED PAIRS

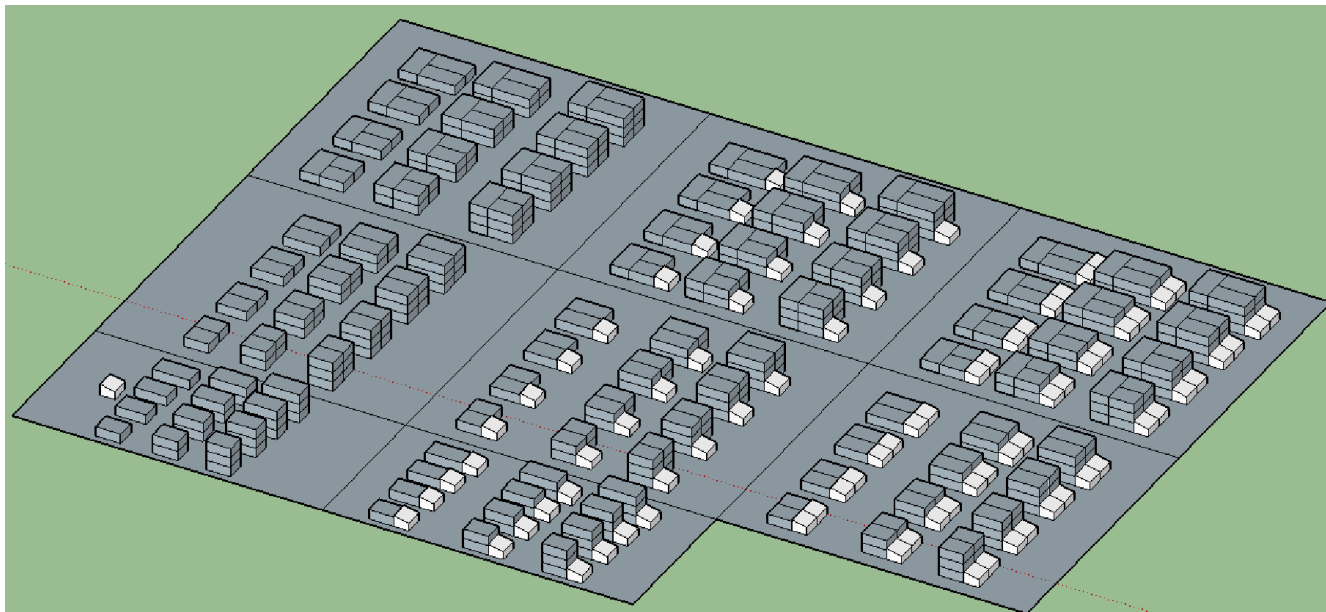
Evolve house types - Streetscape 3 - Rural Tudor style - 2/3 bed terrace



From a limited number of platforms...



100+ archetypes, 10,000+ layouts, 1bn+ variations

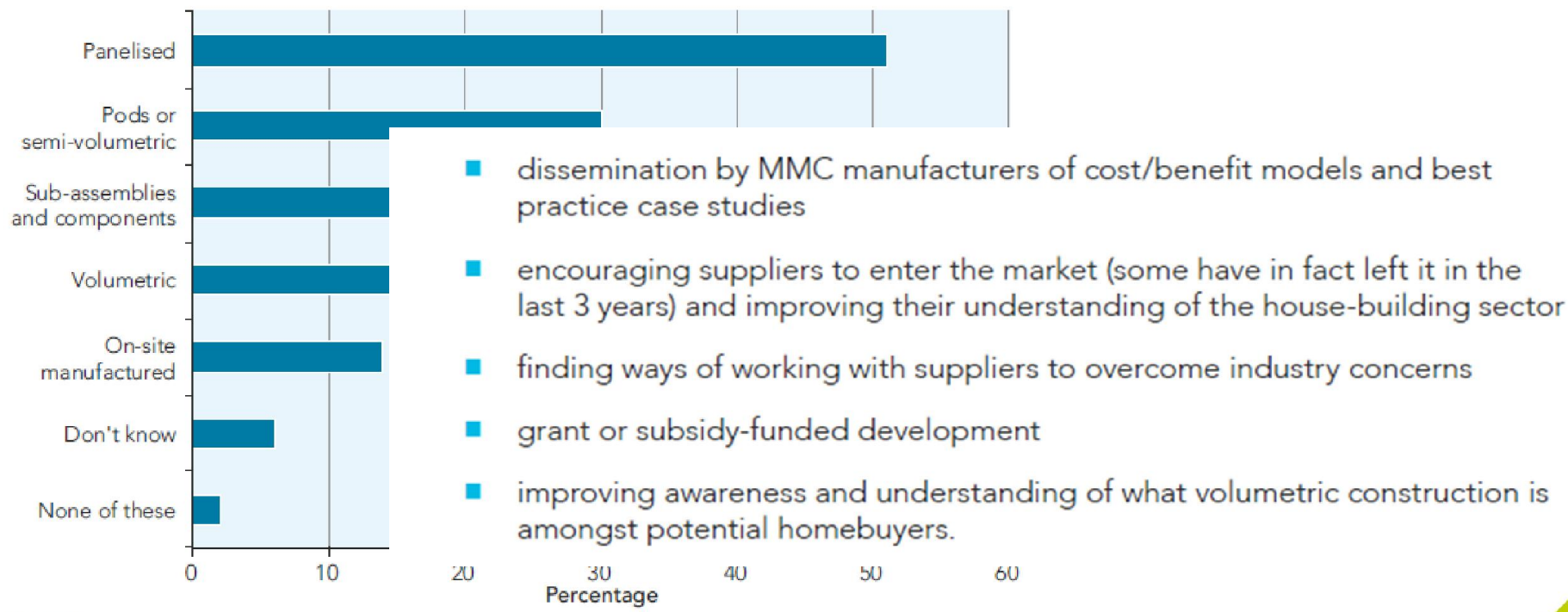


Can we re-create beautiful streets in modular?



Can we re-create beautiful streets in modular?



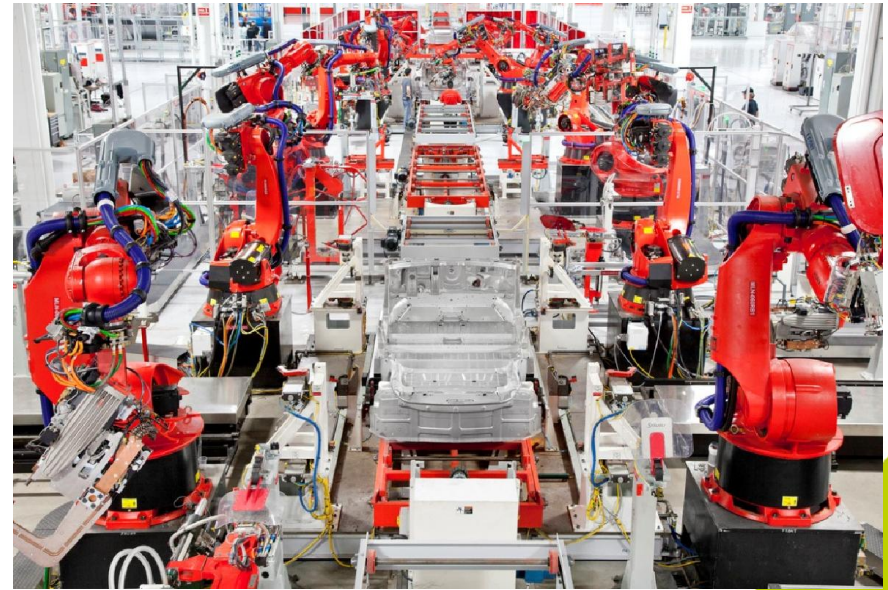


Base: 135.

Figure 25 MMC approaches considered most likely to grow in use in new build over the next 3 years



Would you buy a car built in a field?



The Benefits of “Smart Construction”

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