

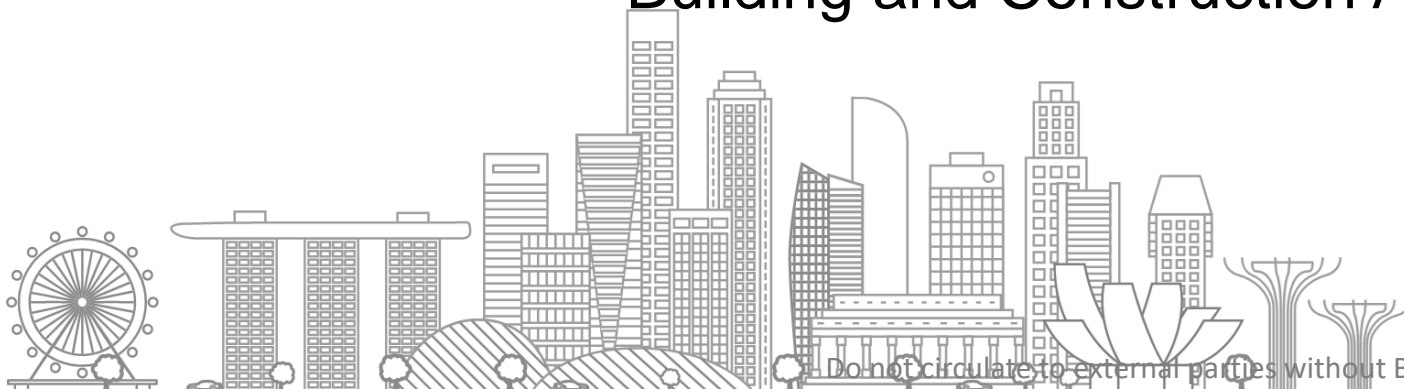
Consultation on Guidebook for Plans Submission and PTO Application of Fixed Installations



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Guidebook for Plans
Submission and PTO
Application of Fixed
Installations



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Objective of Presentation

- Consultation on **Guidebook for Plans Submission and PTO Application of Fixed Installations**
- Draft of Guidebook can be downloaded from the common link to the webinar materials: (<https://www1.bca.gov.sg/regulatory-info/lifts-escalators/resources-from-past-events>)
- Feedback on the draft guidebook and its contents can be sent to us via online feedback form for the webinar (<https://go.gov.sg/lift-and-escalator-webinar-dec-2021-feedback-form>)



Contents of Draft Guidebook

- Overview of Fixed Installation Regulatory Regime
- Plans Submission Requirements
- Requirements for Application of New PTO/PTO after Major A/R works
- Lists of Material Changes to Submitted/Approved Design
- Lists of Immaterial Changes to Submitted/Approved Design
- Lists of Major A/R that require the submission and approval of Plans
- Lists of Major A/R that do not require the submission and approval of Plans

Please note that draft is subject to changes. A finalised version of the guidebook will be published at a later date.



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Regulatory Regimes for Different Project Types

- New Installations
- Major A/R works

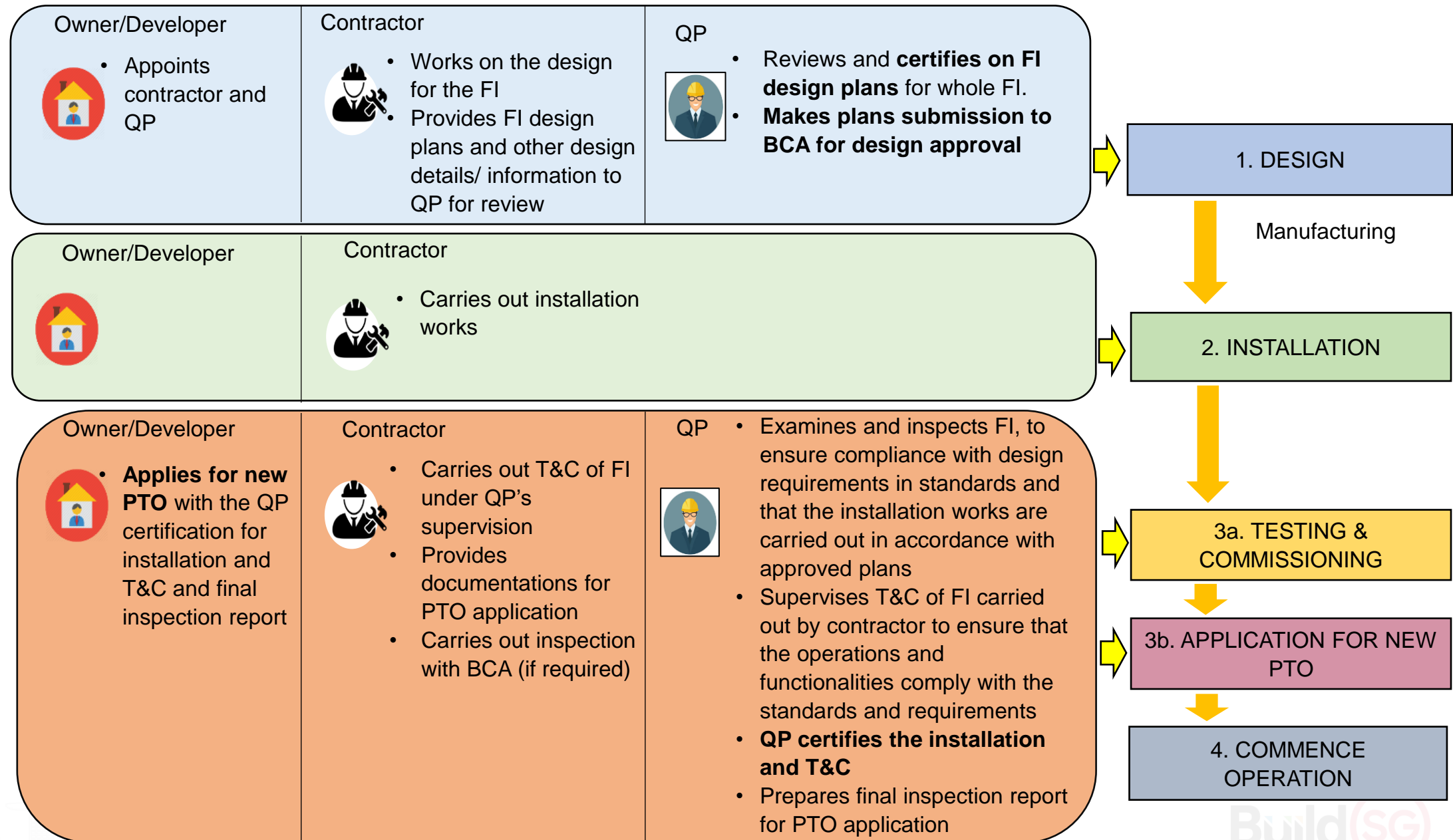


New Installations

- Such works will require plans submission (with QP certification on design) and approval prior to commencement of work, followed by T&C and application of new PTO (with QP certification on installation and T&C).
- PTO will be a prerequisite for the issuance of TOP for a new building.



Regulatory Regime – New Installations



Two types of Major A/R works

- A. Major A/R works that **require submission and approval of plans** before the work commence
- B. Major A/R works that do not require submission and approval of plans before the work commence

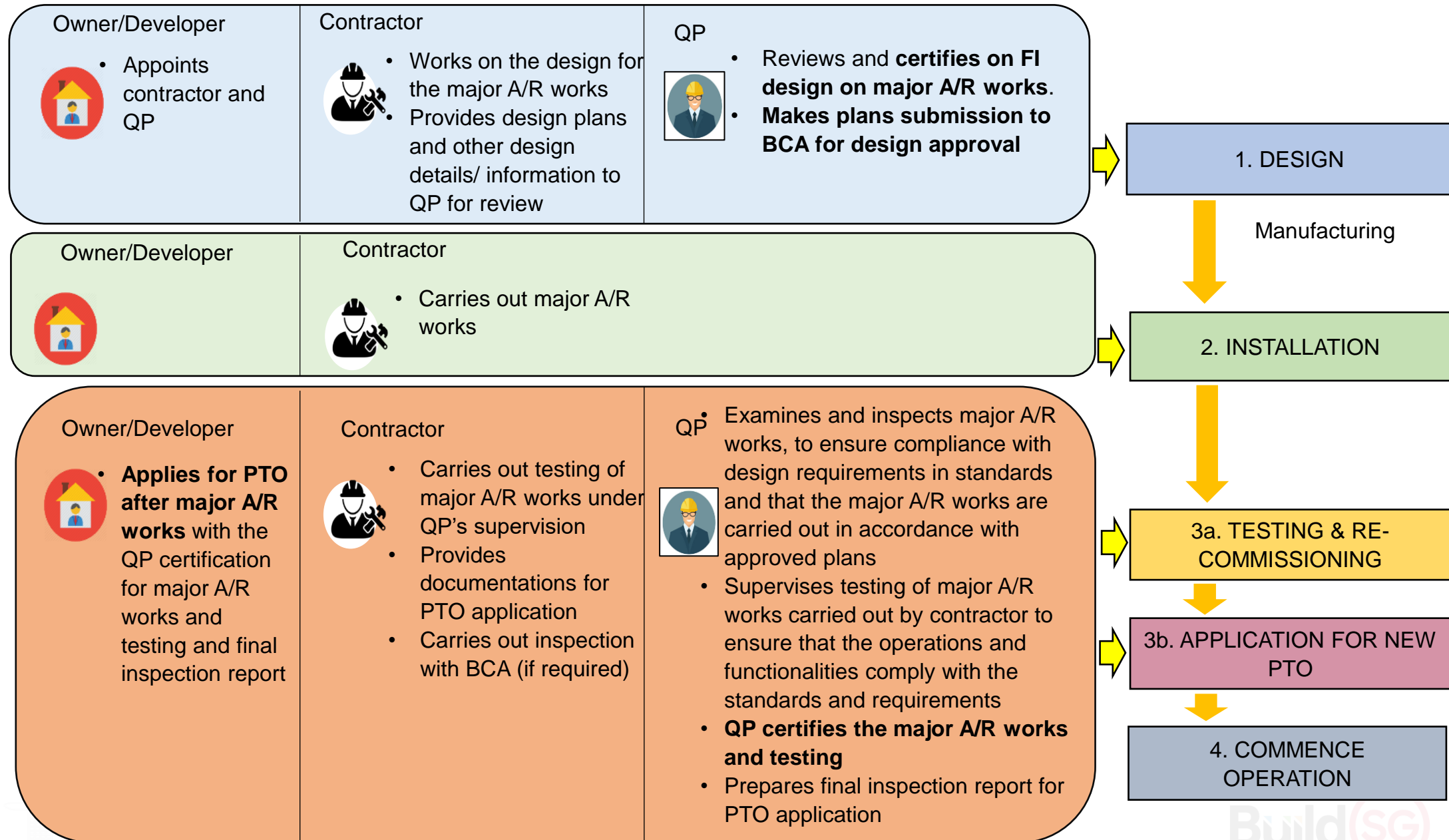


Major A/R works that require plans submission and approval

- Such works will require plans submission (with QP certification on design) and approval prior to commencement of work, followed by testing on the major A/R parts and application of PTO after major A/R works (with QP certification on major A/R works and testing).
- PTO will be a prerequisite for the issuance of TOP for a building (if the major A/R works are part of the A&A works of the building).

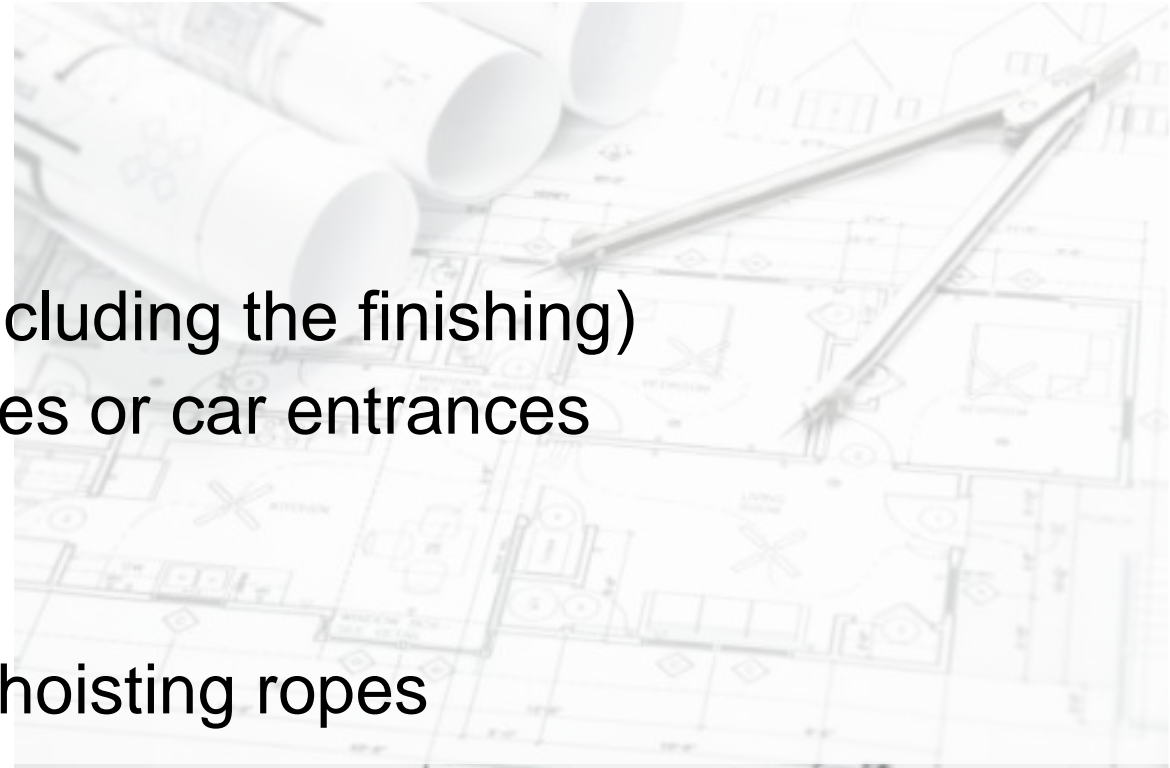


Regulatory Regime – Major A/R (with plans submission)



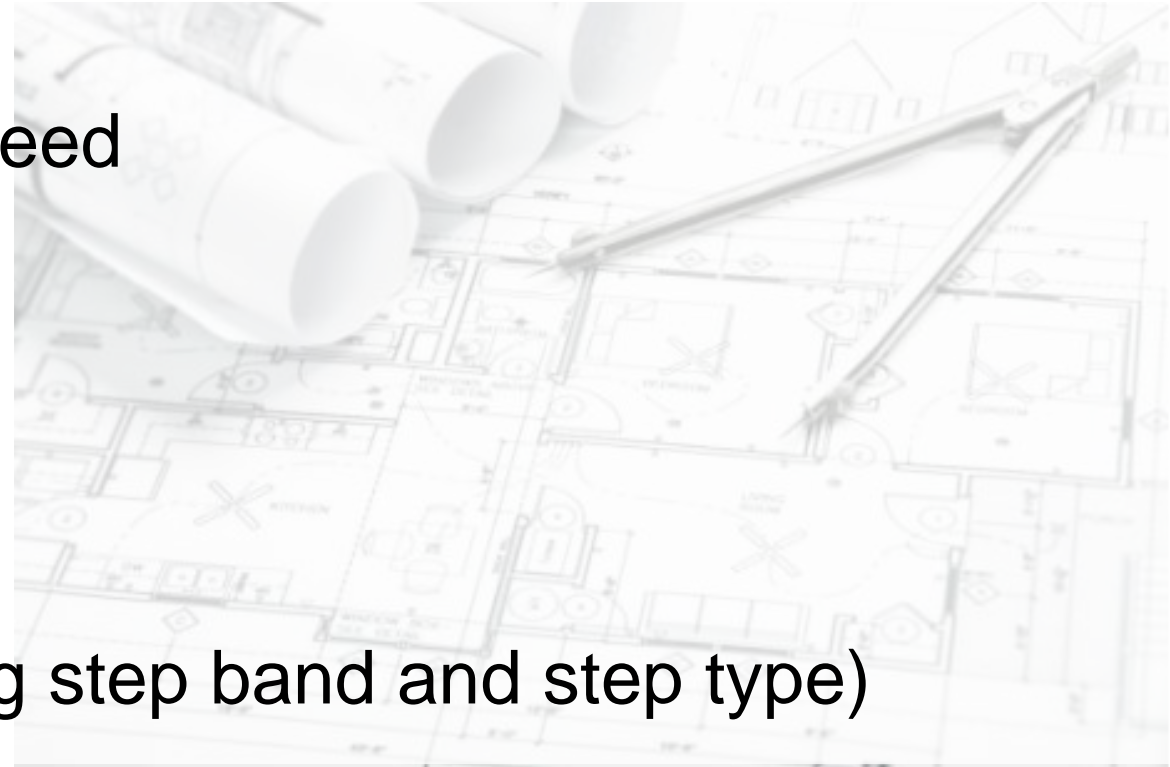
Examples of major A/R works that require plan submission and approval (SS550 Lifts)

- Changing rated speed
- Changing rated load
- Changing mass of the car ($\geq 5\%$) (including the finishing)
- Adding one or more landing entrances or car entrances
- Changing the type of drive system
- Changing the brake system
- Changing the number or size of the hoisting ropes
- Changing the controller model
- Changing any type tested safety components (e.g. ACOP, UCMP, governor, safety gear, safety circuits with PESSRAL)



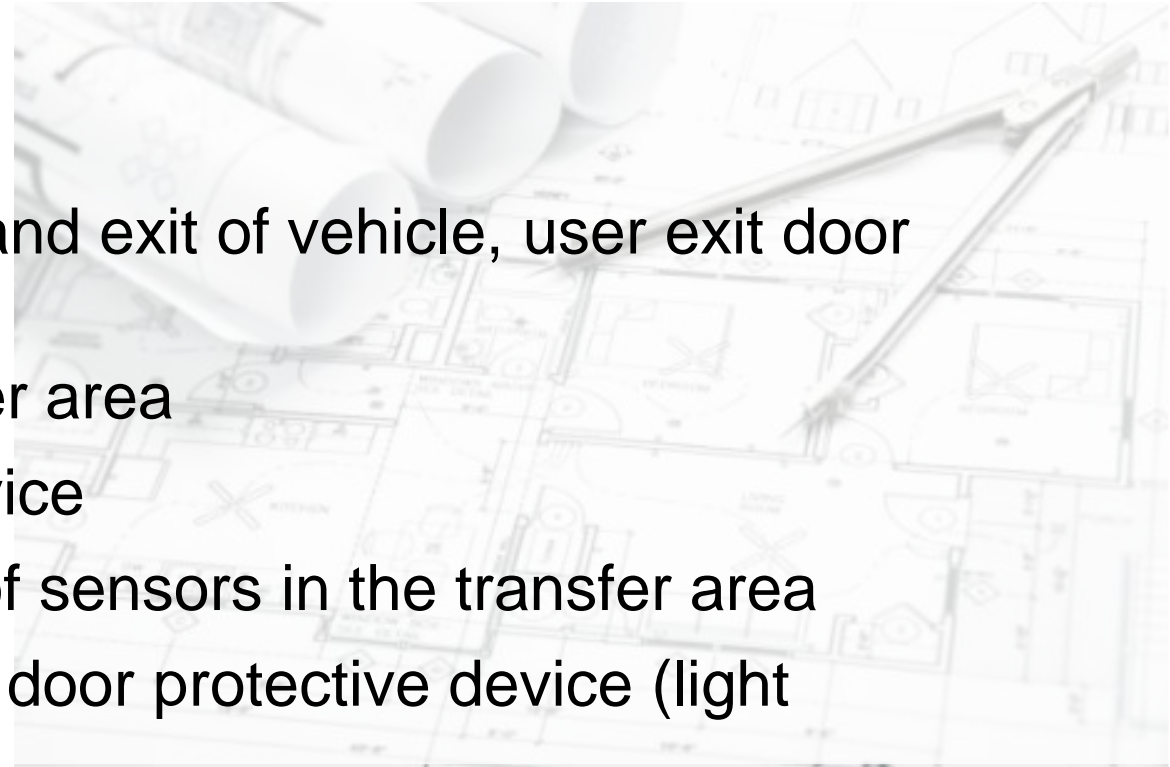
Examples of major A/R works that require plan submission and approval (Escalators)

- Increasing the maximum rated speed
- Changing the drive system
- Changing the auxiliary brakes
- Changing the brake system
- Changing the controller model
- Changing the step band (including step band and step type)



Examples of major A/R works that require plan submission and approval (MCPS)

- Changing the rated load
- Changing the location of the entrance and exit of vehicle, user exit door and emergency door
- Changing the dimensions of the transfer area
- Changing the design of the anti-fall device
- Changing the positions and coverage of sensors in the transfer area
- Changing the position and coverage of door protective device (light curtain/photo sensor)
- Changing the control e.g. hold to start, automatic parking and retrieval process before and after the user enter and leave the transfer area
- Changing the control and logic programming (that affects the transfer area)

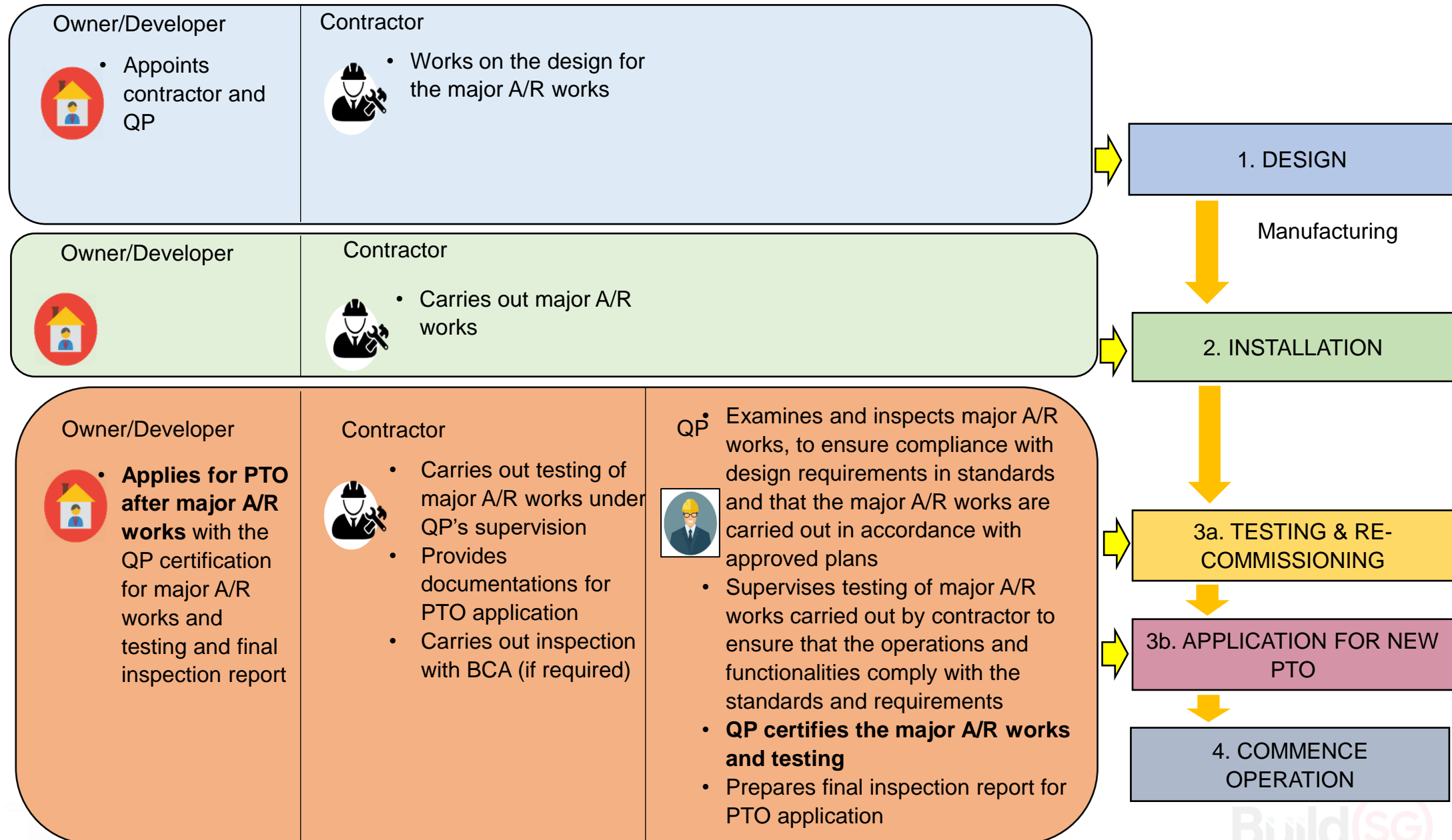


Major A/R works that do not require plans submission and approval

- Such works may commence without the need of plans submission and approval, followed by testing on the major A/R parts and application of PTO after major A/R works (with QP certification on major A/R works and testing).
- PTO will be a prerequisite for the issuance of TOP for a building (if the major A/R works are part of the A&A works of the building).

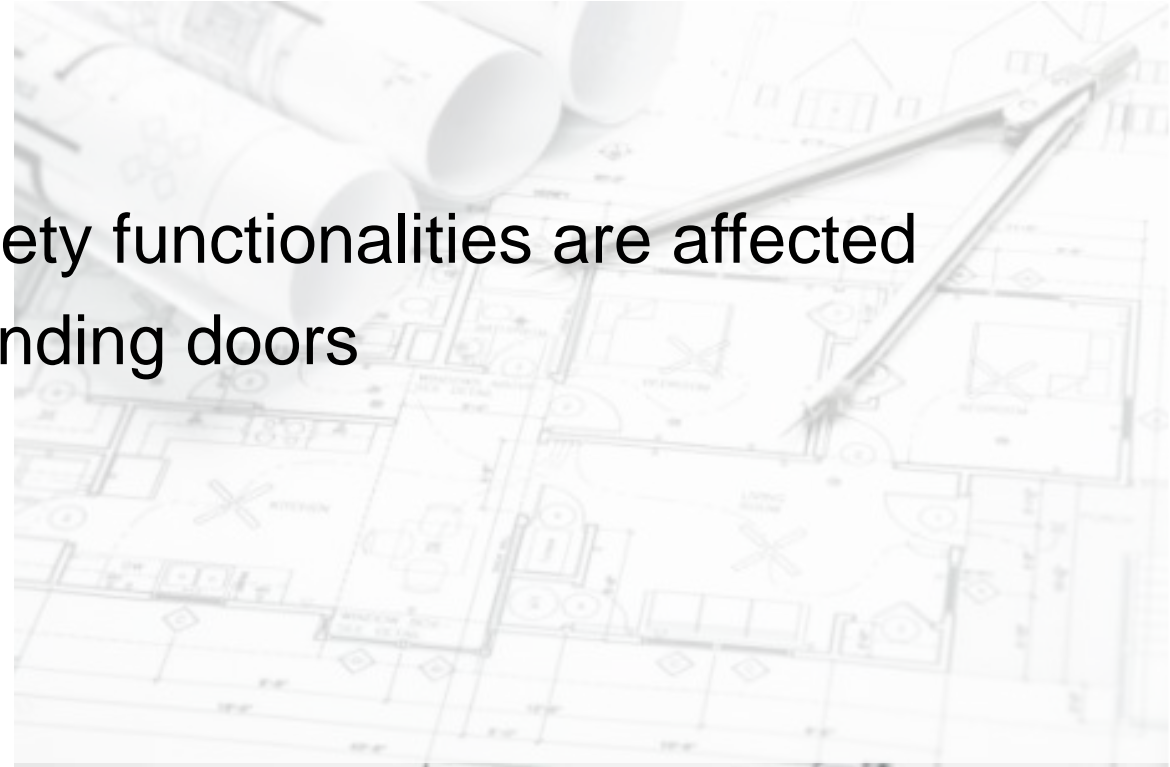


Regulatory Regime – Major A/R (w/o plans submission)



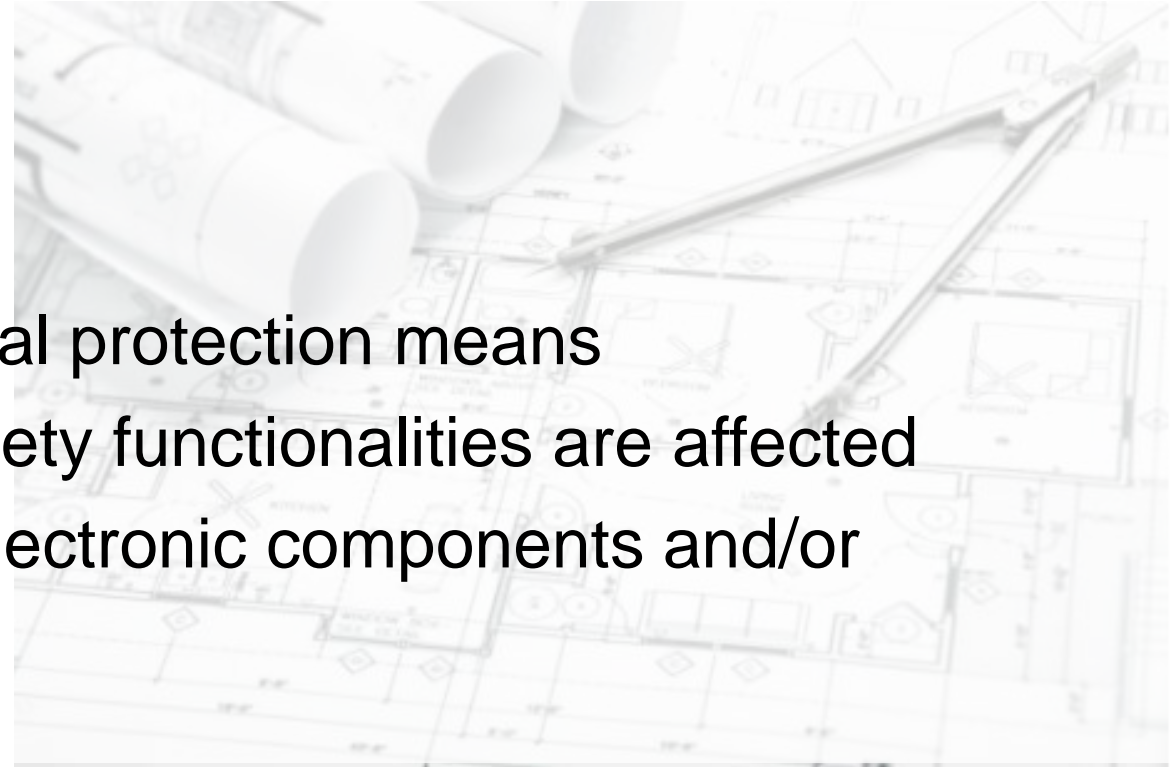
Examples of major A/R works that do not require plan submission and approval (SS550 Lifts)

- Changing the type of hoisting ropes
- Changing the software such that safety functionalities are affected
- Changing the type of car doors or landing doors
- Changing the pawl device
- Changing the hydraulic jack
- Changing the pressure relief valve
- Changing the compensation system



Examples of major A/R works that do not require plan submission and approval (Escalators)

- Changing the truss
- Changing the balustrade
- Changing the overspeed and reversal protection means
- Changing the software such that safety functionalities are affected
- Changing safety circuit containing electronic components and/or programmable electronic system



Plans submission requirements

- Types of info/documents to be submitted:
 - Equipment Data (e.g. rated speed, rated load, model number)
 - Plans and Drawings (e.g. hoistway drawings, machine room layouts)
 - Certificates and Reports (e.g. type testing certificates and reports)
- The lists of submission requirements will be published in the guidebook (SS550 traction and hydraulic lifts, VPLs, stairlifts, escalators, MCPS).
- For submission of plans for major A/R works, the QP may submit only the information and documents within the submission requirement lists that are relevant to the major A/R works.



Deviations from Submitted/Approved Plans before getting PTO

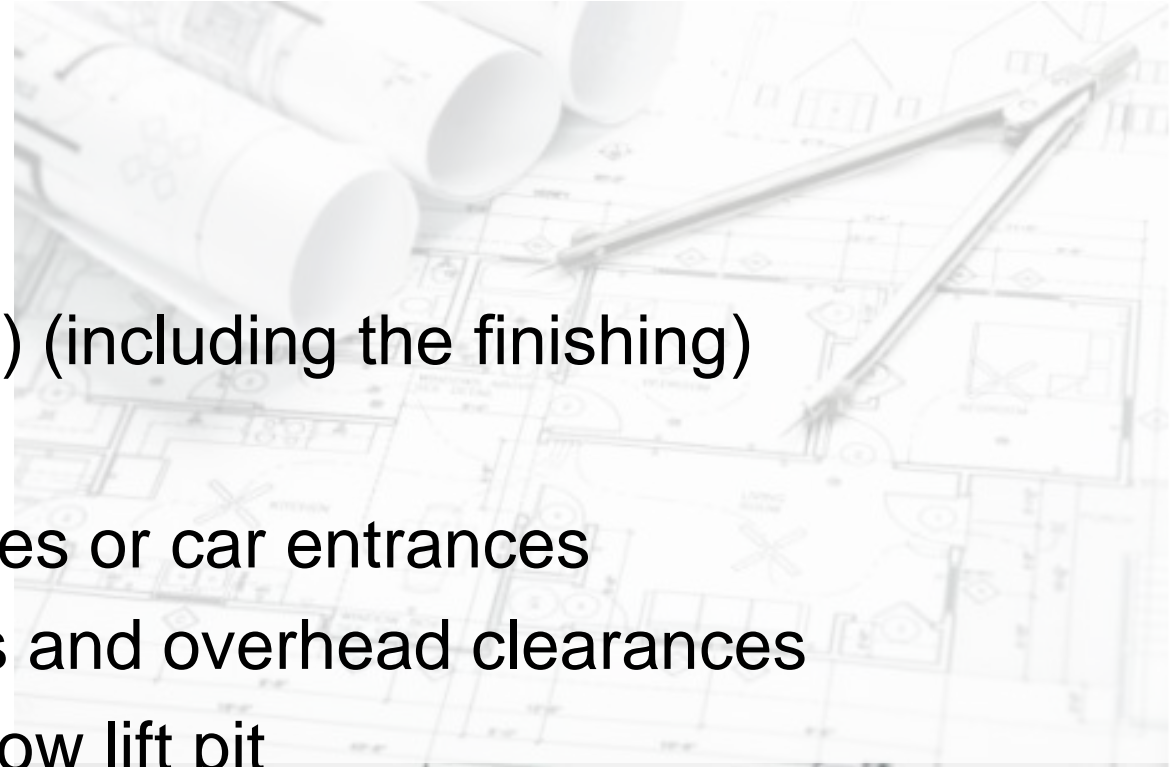
- **Material Changes** – Any deviations from the submitted/approved design prior to obtaining the PTO that fall within the lists of material changes will require the submission and approval of **amendment plans** before the commencement of works.
- **Immaterial Changes** – Any deviations from the submitted/approved design prior to obtaining the PTO that fall within the lists of immaterial changes will require the submission of **as-built plans**. Works can proceed without the need to obtain design approval for the as-built plans. As-built plans can be submitted after the completion of the relevant works, just before the application for PTO.

The QP may submit only the information and documents within the submission requirement lists that are relevant to the amended works.



Examples of material changes (SS550 lifts)

- Changing the rated speed
- Changing the rated load
- Changing the mass of the car ($\geq 5\%$) (including the finishing)
- Changing the travel distance
- Adding one or more landing entrances or car entrances
- Changing the car bottom clearances and overhead clearances
- Providing new occupancy space below lift pit
- Changing any type tested safety components (e.g. ACOP, UCMP, governor, safety gear, safety circuits with PESSRAL)



Examples of material changes (Escalators)

- Increasing the maximum rated speed
- Changing the drive system
- Changing the auxiliary brakes



Examples of material changes (MCPS)

- Changing the rated load
- Changing the location of the entrance and exit of vehicle, user exit door and emergency door
- Changing the dimensions of the transfer area



Requirements for Application of New PTO/PTO after Major A/R works

- Types of info/documents to be submitted
 - Equipment Data (mainly data that are usually not available during design e.g. ARD, UPS data)
 - Certificates and Reports (mill test certificates, final inspection reports etc)
- Final inspection report templates will be published in the finalised version of the guidebook (SS550 traction and hydraulic lifts, VPLs, stairlifts, escalators, MCPS).



Thank you



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