



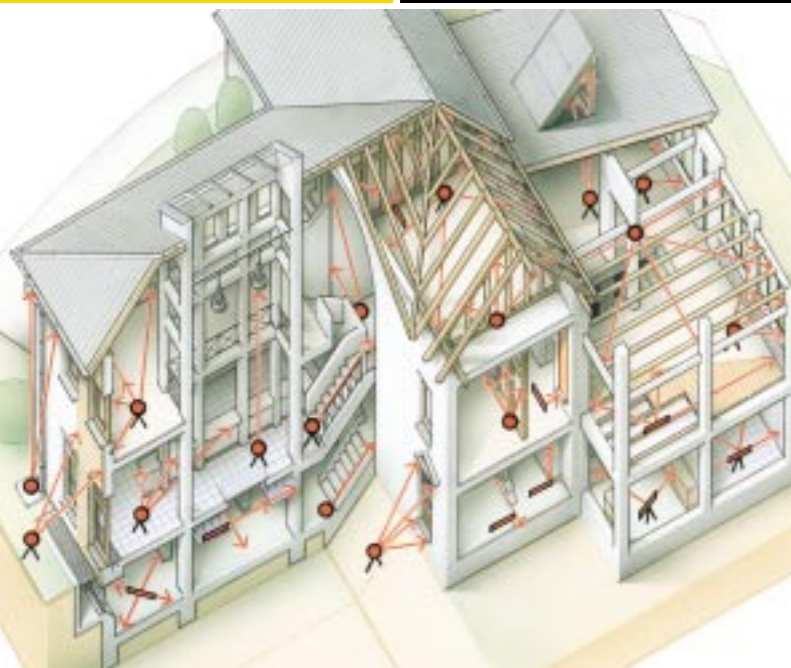
Type LAPR 100: Self-levelling pendulum rotation laser.

- With STABILA's automatic pendulum rotation laser, you can work at an unbelievable speed with the greatest accuracy.
- Once erected, the unit is immediately ready for use.
- The self-levelling range of 1° enables the unit easily to be adjusted for large irregularities of up to 9° by inclining the casing manually.
- The whole laser casing is fitted with slip-on covers on the high-grade steel handles.
- This type of construction enables the laser beam to be adjusted vertically by approx. 12 cm directly on the unit.
- The rotary laser beam, together with the receiver, also enables you to work without a problem over large distances outdoors.

Supplied complete with rotation laser Type LAPR 100 with point and line mode, laser goggles, target plate with measuring rod and receiver. In a strong plastic carrying case.

Laser class	Output	Laser wavelength	Horizontal accuracy	Receiver range*	Battery life	Art. No.
2	< 1 mW	635 nm	± 0,3 mm/m	90 m	approx. 16 hours	15583/4

* At 21°C, under optimum atmospheric conditions

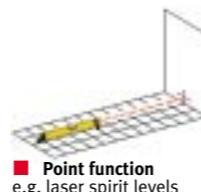


Laser measuring instruments have conveniently revolutionised the construction, renovation and refurbishment industries.

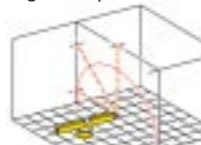
There are three reasons for this: 1. Laser measuring instruments work very precisely at all distances. 2. They facilitate hand rotation measurements, which previously required time-consuming stages. 3. By using them a single person can take measurements where otherwise, without a laser measuring instrument, two or three people would be required. Anyone deciding to purchase a high quality laser measuring instrument will reap the benefits from it for many years, from hanging pictures to building complete houses, or vice versa. Just like any precision instrument, a good laser measuring instrument never comes cheap but it is a highly profitable investment in precision, safety and time saving. This guide-booklet is designed to help you to determine your own personal requirements so that you can be sure you are making the right investment.

Laser function	Point function	Point function with 90°	Line function	Plumb-line function	Rotation function
Measurement procedure	The laser beam is visible as a dot on the viewed surface.	The laser beam emerges at an angle of 90° to the horizontal.	The lens projects the laser beam as a line on floors, walls and ceilings.	Transfers a determined point from the floor to the ceiling.	The laser beam rotates horizontally 360° around its vertical axis.
Application range	Horizontal levelling: e.g. installing walls, aligning windows, laying out sockets and switches, aligning cupboards, furniture, pictures ...	Vertical levelling: e.g. installing partitions, erecting roofs, building car ports and pergolas, tiling ...	Vertical projection: e.g. aligning wall panelling, marking stud partitions, extending roof pitch lines ...	Transferring measurement points: e.g. designing lighting assemblies, establishing ceiling piercings and stairways holes ...	Horizontal levelling: e.g. surveying excavation floors, levelling ready-made components and floorings, installing ceilings and shafts ...
Laser measuring instruments	1. Laser spirit level 2. Manual point laser 3. Automatic point laser	1. Laser spirit level with 90° Penta prism rotation for all point functions 2. Manual point laser 3. Automatic point laser	1. Laser spirit level with line function 2. Manual line laser 3. Automatic line laser	1. Manual point laser with plumb-line function 2. Automatic point laser with plumb-line function	1. Laser spirit level on base plate 2. Manual rotation laser 3. Automatic rotation laser

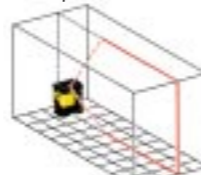
Laser functions, application range and types of laser measuring instruments. There are five different laser functions, enabling you to use these modern measurement techniques with extreme versatility. There are also different types of laser measuring instruments with different combinations of functions. Stabila, an international leader in the manufacture of laser measuring instruments with over 100 years of tradition, builds the correct instrument for each application – from laser spirit levels to fully automatic rotation lasers.



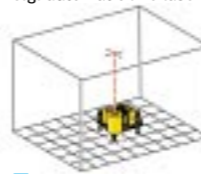
Point function
e.g. laser spirit levels



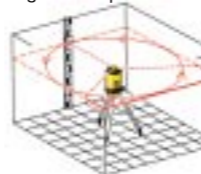
Point function with 90°
e.g. laser spirit levels with 90° Penta prism



Line function
e.g. automatic line laser



Plumb-line function
e.g. manual point lasers



Rotation function
e.g. automatic rotation lasers

What do you measure – now and in the future?

Checklist: 1. Please tick here the activities you wish to pursue now and in the future. 2. Then add the number of the coloured squares – arranged according to colour. 3. Transfer the sum to the evaluation list. Graphics explaining the measurement activities in greater detail are provided on the back page.

Site development/excavations/drainage work/foundations

- 1. Survey excavation walls
- 2. Determine pipe descents
- 3. Align building corners, mark strings, excavations
- 4. Establish excavation floors
- 5. Determine embankment heights
- 6. Survey pit linings
- 7. Determine heights/drops of ground pipes and cables
- 8. Level concrete bases and foundations

Building shell construction

- 1. Establish the heights for concrete ceiling formwork
- 2. Align formwork for concrete support
- 3. Measure reinforced concrete beams and formwork
- 4. Align system formwork walls
- 5. Level brick course heights

- 6. Align wall insulation and formwork
- 7. Establish wall piercings
- 8. Level parapets and lintels
- 9. Align pre-cast shaft components (e.g. air conditioning ducts)
- 10. Level staircase mouldings and stairways – determine parallel slopes
- 11. Produce bends
- 12. Align ready-made components
- 13. Plumb-line chimneys
- 14. Align roof constructions
- 15. Precisely install steel supports and substructures

Internal and external finishing work

- 1. Level façade coverings and wooden shuttering
- 2. Align internal walls and coverings
- 3. Install ceiling coverings and false ceilings
- 4. Level floor coverings, slopes, rows of tiles, false floors for air conditioning or cables
- 5. Align windows
- 6. Install internal and external doors
- 7. Align stairs and landings
- 8. Fit dividing and installation walls
- 9. Fit sanitary, electrical and gas installations / lay out lights, sockets and switches
- 10. Install pipes and radiators
- 11. Install walls, cupboards, furniture – level pictures
- 12. Roof construction: level walls and dormer windows
- 13. Align balconies, roof terraces, railings
- 14. Carry out painting and decoration work: e.g. wallpapering
- 15. Tiling floors and walls

External buildings/Installations/Landscape gardening

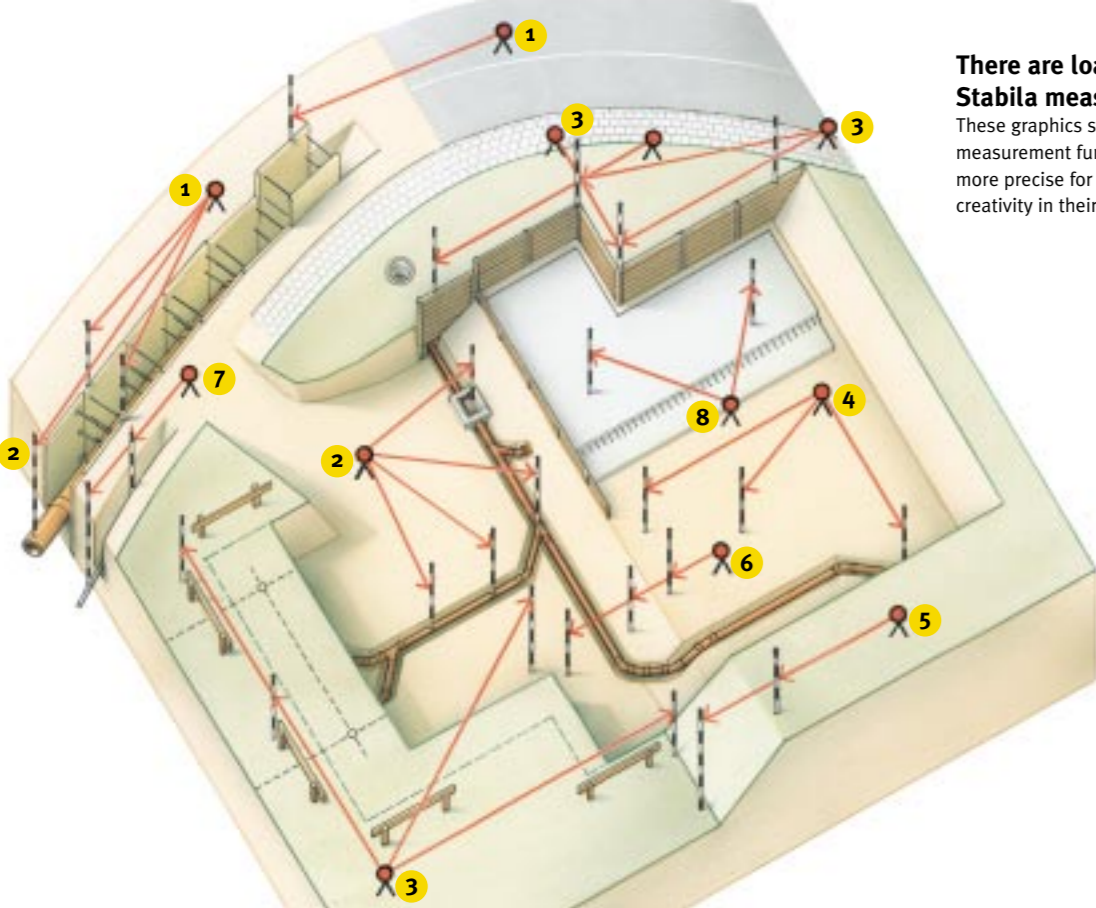
- 1. Determine land topography and height
- 2. Lay car parks
- 3. Measure out roads and footpaths
- 4. Level garage access ways and drainage channels
- 5. Lay drains in yards
- 6. Lay and levelling terraces
- 7. Lay garden paths
- 8. Erect external walls, fences and sound insulation walls
- 9. Build pergolas and seating areas
- 10. Erect car ports, roof over rubbish bins
- 11. Lay out and level roof gardens
- 12. Landscape façades



Evaluation: 1. Enter the resultant sum per colour here. This enables you to recognise the required laser functions. 2. Question: do you use these laser functions occasionally, frequently or constantly? 3. From this, select your type of equipment. Some types have several functions and therefore cover a broad spectrum of applications.

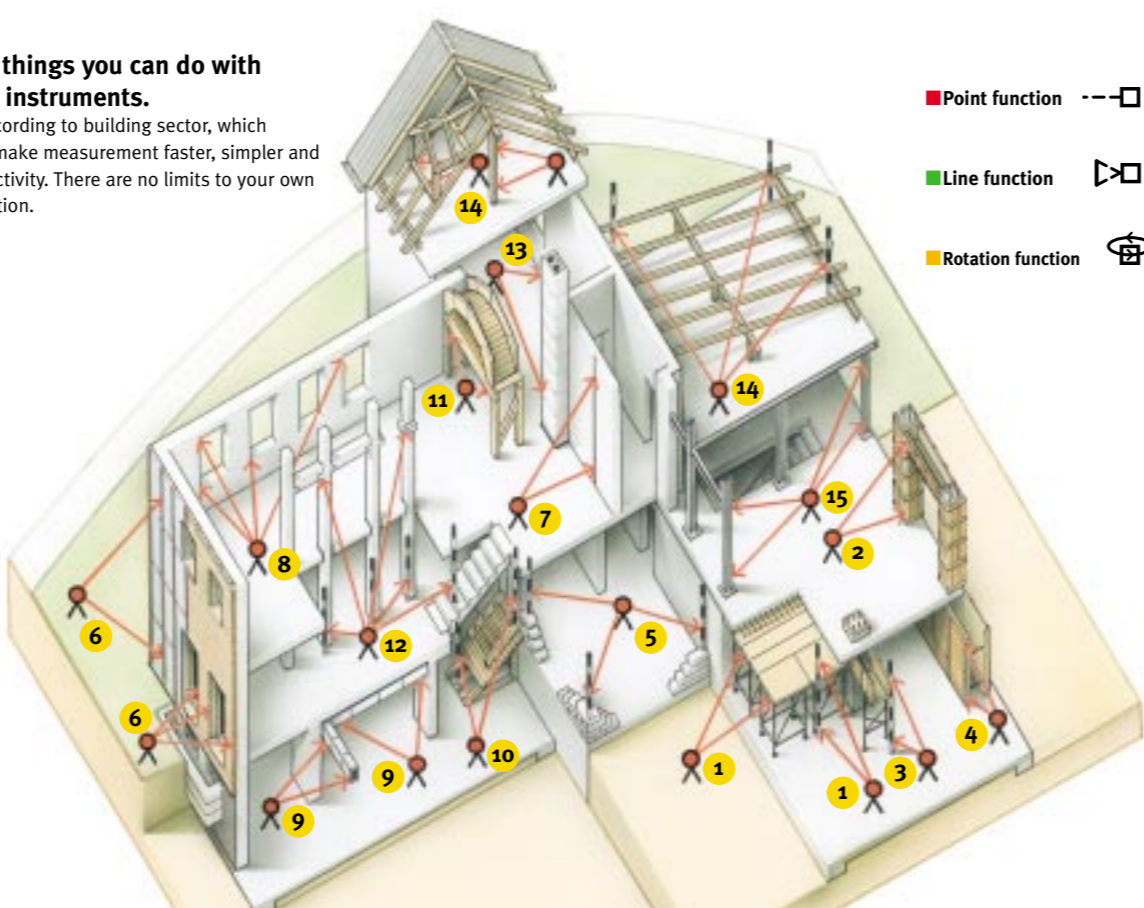
Necessary laser functions	Occasional	Frequent	Constant
Point function 	Laser spirit level ■	Manual point laser ■ ■	Automatic point laser ■ ■ ■
Point function with 90° Penta prism 	Laser spirit level with 90° Penta prism ■ ■	Manual point laser with 90° Penta prism ■ ■ ■ ■	Automatic point laser with 90° Penta prism ■ ■ ■ ■
Line function 	Laser spirit level with line function ■ ■	Manual line laser ■ ■ ■ ■	Automatic line laser ■ ■ ■ ■
Plumb-line function 	Manual point laser with plumb-line function ■ ■	Manual point laser with plumb-line function ■ ■ ■ ■	Automatic point laser with plumb-line function ■ ■ ■ ■ ■ ■
Rotation function 	Laser spirit level on base plate ■ ■	Manual rotation laser ■ ■ ■ ■ ■ ■	Automatic rotation laser ■ ■ ■ ■ ■ ■ ■ ■

Check whether laser measurement technology would be useful for you!



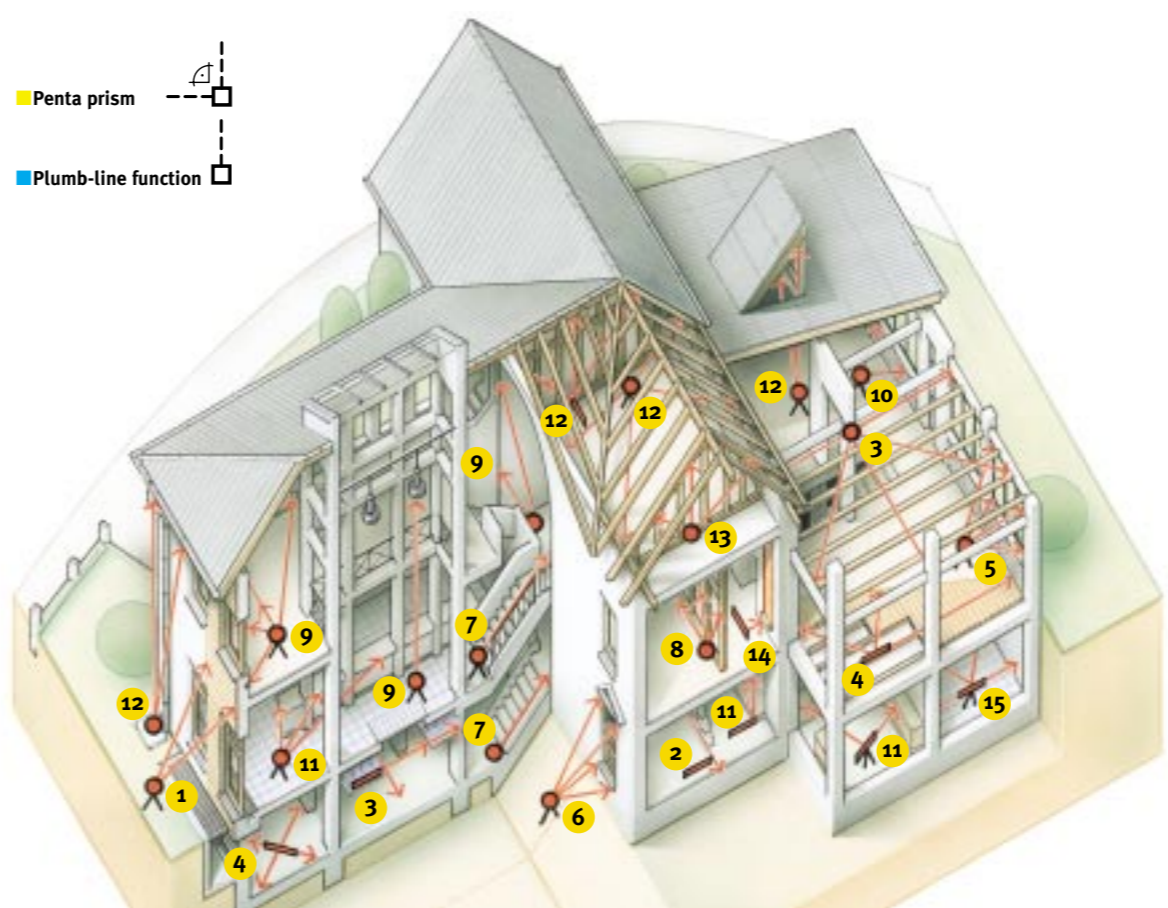
There are loads of things you can do with Stabila measuring instruments.

These graphics show, according to building sector, which measurement functions make measurement faster, simpler and more precise for which activity. There are no limits to your own creativity in their application.



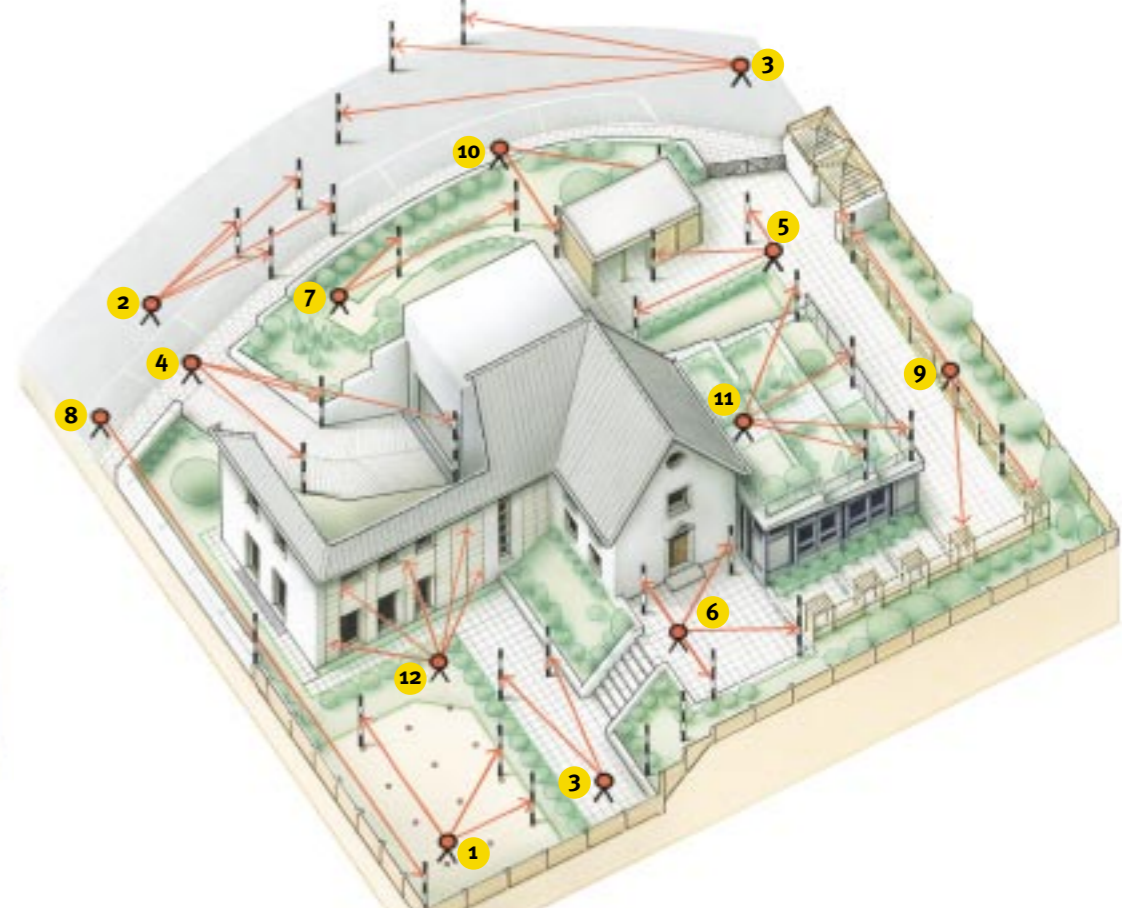
Building shell construction: 1. Establish the heights for concrete ceiling formwork | 2. Align formwork for concrete support | 3. Measure reinforced concrete beams and formwork | 4. Align system formwork walls | 5. Level brick course heights | 6. Align wall insulation and formwork | 7. Establish wall piercings | 8. Level parapets and lintels | 9. Align pre-cast shaft components (e.g. air conditioning ducts) | 10. Level staircase mouldings and stairways – determine parallel slopes | 11. Produce bends | 12. Align ready-made components | 13. Plumb-line chimneys | 14. Align roof constructions | 15. Precisely install steel supports and substructures

- Point function - - □
- Line function ▽ □
- Rotation function ↻



Internal and external finishing work: 1. Level façade coverings and wooden shuttering | 2. Align internal walls and coverings | 3. Install ceiling coverings and false ceilings | 4. Level floor coverings, slopes, rows of tiles, false floors for air conditioning or cables | 5. Align windows | 6. Install internal and external doors | 7. Align stairs and landings | 8. Fit dividing and installation walls | 9. Fit sanitary, electrical and gas installations / lay out lights, sockets and switches | 10. Install pipes and radiators | 11. Install walls, cupboards, furniture – level pictures | 12. Roof construction: level walls and dormer windows | 13. Align balconies, roof terraces, railings | 14. Carry out painting and decoration work: e.g. wallpapering | 15. Tiling floors and walls

- Penta prism - - □
- Plumb-line function □



External buildings/Installations/Landscape gardening: 1. Determine land topography and height | 2. Lay car parks | 3. Measure out roads and footpaths | 4. Level garage access ways and drainage channels | 5. Lay drains in yards | 6. Lay and leveling terraces | 7. Lay garden paths | 8. Erect external walls, fences and sound insulation walls | 9. Build pergolas and seating areas | 10. Erect car ports, roof over rubbish bins | 11. Lay out and level roof gardens | 12. Landscape façades

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