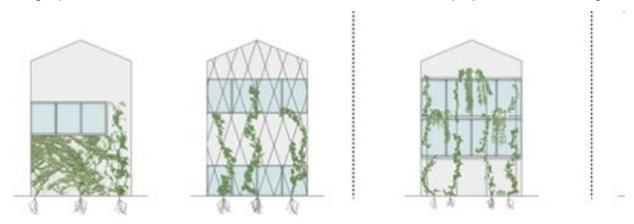
2.3 Installation of vertical greening systems

The installation of a vertical greening system is a complex job that requires skilled workers. Large living walls and green facades in public spaces require approval from the local administrative authorities, while domestic living walls and indoor projects tend not to need permission.

2.3.1 Installation of green facades

When installing stainless steel wires or grids for green facades, particular attention must be given to their anchorage to the insulated facades because of the weight of the plants. Special thermal bridge spacers must be used to ensure secure installation and the thermal properties of the building.



Kategorisierung verschiedener möglicher Pflanzenfassaden © Nicole Pfoser 09/2009 Grundlage: Diagramme (FLL 2000, S. 19; Kaltenbach 2008, S. 1455), Ergänzungen durch Verfasserin.

Figure 1: Instalation of vines

2.3.2 Installation of living walls

While every living wall system is slightly different in terms of the installation process, there are a number of common issues.

2.3.2.1 Health and safety checks

There are a number of health and safety requirements which must be adhered to:

- Every worker must have a license for working at height
- Every worker must have protective work equipment (helmet, safety rope, safety shoes)
- Every worker must be familiar with the machinery on site
- Each piece of lifting equipment has its own capacity, which must not be exceeded by workers,
 materials and equipment weight
- The entire work area must be protected against unauthorized access

- Nearby routes in the work area must be protected from falling objects
- Lifting devices must be properly located and secured

2.3.2.2 Inspection of the facade

Before starting work the team leader needs to verify the condition of the facade to which the living wall will be anchored: it needs to be stable and free of cracks or other signs of damage. Any damage may later result in its collapse due to wind, ice and snow, in addition to the weight of the living wall.

2.3.2.3 Positioning and levelling

The dimensions and position of the living wall, its substructure and ancillary facilities, such as holes for lighting, ventilation, irrigation, etc., need to be marked out according to the prepared plans. The horizontal and vertical positions must be marked on the wall using a laser level, and then checked for square using the '3-4-5 method'.



Measuring the position



Leveling



Vertical positioning

NEXT