



8. Therapy room and design

Both the design of the **therapy room** as the **inside- and outside-cat room** is being discussed here.

- *Room size:*
 - Therapy room:
 - Minimum 16m².
 - Take wheelchair users into account (minimum 85cm for the doorways and minimum 170cm for turning).
 - Inside-cat room:
 - 40m², but it is also depending on the number of cats
 - Outside-cat room:
 - Minimum 50m², but it is also depending on the number of cats
 - Make clever use of the available three-dimensional space by using levels at different heights (e.g. catwalks, platforms...)
- *Accessibility to the areas:*
 - Therapy room:
 - Accessible for the cats, the patient and his/her counsellor/care giver.
 - Inside-cat room:
 - Only accessible for the cats and the permanent cat care giver at the facility.
 - Outside-cat room:
 - Only accessible for the cats and the permanent cat care giver at the facility.
- *Passageways:*
 - Free access from one room to another, through e.g. small passageways, doorways, catwalks (above floor level), cat doors...
 - Ensure free passage for all cats at any time by providing n+1 passageways (n = number of cats). Distribute passageways strategically, thus providing escape routes for each individual.
- *Shuttersystem:*
 - To prevent animals from escaping and allowing patients to access/leave the therapy room at their discretion.
- *Floor (anti-slip floors and no porous material) (Kohier, 2011):*
 - Preferably use materials that are even, easy to clean and can withstand lots of cleaning such as:
 - A polyurethane poured floor or tile carpeting with a closed structure.



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- A short-pile nylon carpet made with a closed pvc back.
- Rubber mats can also be used (they provide more grip but are difficult to clean).
- To prevent the substrate from being too slippery, rough carpet can be laid on top. This can be done, for example, using Velcro so that the carpet can be removed and washed.
- No thresholds higher than 2cm (wheelchair users).
- *Walls:*
 - Painted with chlorinated rubber coating or with a standard commercially available paint, lacquered to make it easy to clean.
- *Noise:*
 - Lots of noise often causes stress in cats. Therefore using sound-damping materials in the construction/renovation of the AAI areas (both for external noise and echoing from inside noises) is recommended.
- *Lighting* (Herron & Schreyer, 2014):
 - The room is adequately lit with natural light and LED lighting (Kohler, 2011), avoid bright lights from e.g. TL lighting.
 - The cat's resting place may be a bit darker.
 - Take into account the flicker fusion threshold + the ultrasonic sound (for example, avoid TL lighting).
- *Ventilation:*
 - The rooms must be well ventilated (Kohler, 2011). Open a window in good time or make sure there is a ventilation system. Never use lever windows without an additional security grid: curious cats can get stuck in the v-shape of an opened window and die.
- *Temperature:*
 - The room temperature in the indoor space is between 20 °C and 25 °C and should be regularly monitored (Kohler, 2011).
 - Cats prefer a temperature between 30 °C and 38 °C (Stella & Croney, 2016). Make use of warm and isolating bedding, boxes, heating elements or –lamps, to meet their needs (Stella & Croney, 2016).
 - Preferably, provide a number of resting places in cool and warm areas so that the cat can choose where he or she wants to lie at that moment (Stella & Croney, 2016).
 - It is also important that the cat does not lie on a cold floor or remains in a damp room.



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- *Odours:*
 - Cats scent about 40 times better than humans and therefore are highly sensitive to odours. Choose a cleaning product with a neutral scent and avoid air fresheners.
 - Cats mark their environment with their scent by scratching or nuzzling objects, these scent markings are very important to the cat. Whenever the room or objects (e.g. bedding material...) are cleaned, ensure some familiar odours remain by leaving some objects untouched.
 - Feliway® contains a synthetic pheromone that has a comforting and stress reducing effect on cats. Feliway® is available in spray or vaporizer and can be used whenever an event might be stressful for the cats e.g. veterinary visit, change in routine, introduction into a new environment...
 - Use aromatherapy (in particular lavender and camomile) for odours and for a relaxing effect (Graham et al., 2005).

- *Hygiene:*
 - The therapy room must be cleaned daily or before starting an AAI session, depending on the pathology of the patient.
 - The in- and outdoor cat enclosures should be spot-cleaned (only removing soiled materials, uneaten food, bodily secretions or other organic matter) daily. Actual cleaning (soap and water or disinfectant cleaner) only occurs as needed to remove organic material from the surface areas (e.g. weekly). For many cat rooms soap cleaning is not needed on a daily basis and will even cause profound stress in cats, which may lead to a decreasing resistance to pathogens.
 - Choose a room that can be cleaned easily and thoroughly (Ophorst, 2014).
 - Choose a cleaning product, a disinfectant and cleansing solution based on chlorhexidine and cetrimide such as HAC (Hospital Antiseptic Concentrate) for the therapy room. The in- and outdoor cat enclosure can be cleaned with a neutral household detergent. Keep in mind that the use of chlorinated products may incite cats to urinate outside the litter box. Don't ever use cleaning products with phenols (Dettol®), these substances are toxic for cats.

- *Safety:*
 - Make sure the entire area is safe for both cats and humans (e.g. no slippery floors, sharp edges, protrusions, dangerous stairs, glass objects, heaters, etc.).

- *Storage area (for equipment):*
 - Make sure there are hooks on the walls in the therapy room so that some of the equipment (for example, hoops, bowling pins, etc.) are easily accessible, and/or a locked closet in the therapy room to store everything and/or a separate storage space.

- *Furniture:*
 - Durable.
 - Waterproof.



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- Can be disinfected (e.g. imitation leather).
- Adapt the furniture to the activities with the cats and to the patients' pathology (Kohler, 2011).
- *Rest area:*
 - Choose resting areas enclosed on three sides.
 - Choose resting areas preferably above floor level so that the cat can overlook the room.
 - Provide calm areas away from all stimuli, where the cat can retreat to whenever he or she wishes. Put the cat's crate, a blanket or cushion, etc. there (Fine et al., 2015).
 - Number of resting areas: number of cats + 1.
 - Disperse the resting areas.

Example of space- and cost effective cat furniture (Dierenasiel H'Onderdak, The Netherlands):





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- *Water bowls:*
 - Provide bowls of water of large diameter.
 - Preferably ceramic or stainless steel.
 - Provide fresh water daily.
 - Place the water bowls at doorways and far away from food bowls and litter boxes.
 - Number of water bowls: number of cats +1.
 - Disperse the water bowls in the room(s).

- *Food bowls:*
 - Provide shallow bowls of food of large diameter (cats have sensitive whiskers).
 - Preferably ceramic or stainless steel.
 - Place the food bowls in a calm area so the cat can eat without being disturbed.
 - Place the food bowls far away from litter boxes.
 - Number of food bowls: number of cats +1.

Disperse the food bowls in the room(s), so no individual can monopolize the food.

- *Food puzzles:*

Food puzzles encourage foraging behaviour. A proportion of the food should be offered in these food enrichment devices.

- *Litter boxes:*
 - Number of litter boxes = number of cats +1.
 - Place the litter boxes in a calm area (no doorway).
 - Litter box size: minimum one-and-a-half times the length of the cat (enough space to be able to turn around).
 - Litter boxes can be open or closed (with a box top). Remove swinging doors of closed litter boxes, as they can cause inappropriate elimination.
 - Fill the litter boxes with 2cm (ideally, two fingers deep) of soft cat litter, preferably of small particle size and plant-based (e.g. maize, pine or walnut shells).
 - To avoid aversion against the use of the litter box, don't use scented powders or plastic bags.
 - Disperse the litter boxes in the rooms, so no individual can monopolize the litter box.
 - Faeces and urine are scooped out daily.
 - At least once a week: throw away all cat litter, clean the litter box thoroughly with bleach, HAC or a household detergent, allow to dry and refill with fresh cat litter.

- *Cat toys and accessories:*
 - Durable.



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- Preferably small, lightweight and versatile, e.g. ping-pong balls, plush mice, springs...
 - Without small pieces or particles that the cat (and/or child) can swallow.
 - Washable.
 - Give toys that appeal to different senses simultaneously (e.g. vision and hearing in a feather teaser with bell sound).
 - Try to change toys regularly.
 - Ensure enough space is available, so every cat can play on his or her own.
 - Supply strong fishing rods so patients can play with the cats from a safe distance.
 - Frustration and prey related aggression decreases with daily play sessions of 15 minutes in which the hunting instinct of the cat is stimulated.
- *Plants:*
 - Avoid flower pots and prohibit poisonous plants (Kohler, 2011).
 - However, lots of cats eat plant material to aid digestion. Suitable plants are wheatgrass, spider plant (*Chlorophytum comosum*) and umbrella plant (*Cyperus sp.*).
 - *Lookouts:*
 - Cat tree.
 - Gangway, ramp.
 - Raised beds or platforms.
 - Preferably near doorways.
 - Number of lookouts = number of cats +1.
 - Disperse the lookouts in several rooms.
 - *Hideaways:*
 - Preferably near doorways
 - Number of hideaways = number of cats +1.
 - Disperse the hideaways in the room.
 - *Scratching posts:*
 - Marking their territory by scratching is a behavioural need characteristic of cats. Provide scratching posts, scratching mats and scratching boards in both horizontal and vertical directions.
 - Cats also need to stretch out: hang vertical scratching posts or boards at least 76.2 cm high.
 - Preferably near resting areas, where they observe the outside world (e.g. windows), areas with a lot of activity and entrances/exits of a room.



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- *Environment:*
 - Enquire about adjoining rooms and the activities that take place (Kohier, 2011) so that these do not disturb the AAI sessions.
 - By observing the cat's body language you can read his or her emotions. Discomfort, fear or any other problematic behaviour may signal that the environment should be adapted. Seek specialised advice from a competent behavioural cat therapist if necessary.

- *Fencing (outdoor cat room):*
 - Should at least be 1.80m high.
 - A horizontal fence of at least 50cm width is fixed at the top of the fence.
 - Use grill, netting or fencing of metal wire (whether or not coated with plastic), welded at the intersection. Thickness of the wire is 1.6mm, mesh size of maximum 2.5cm.
 - In addition, the grill should be secured along the bottom of the fencing. Attach the wire grill at regular intervals to a wall or solid rear panel or bury it 10cm deep in the ground.