CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Cooling options for the home and garden

Cooling option	Description	
General maintenance	• Frequent and proper maintenance of roofs, windows and doors, including ensuring that windows and doors are operable and able to open and close properly. • Eliminate air drafts coming through windows and doors.	
Ventilation and air circulation	• **Ventilation:** Open doors and windows during the early morning or late evening, and close them as soon as temperatures outside start increasing. • **Cross ventilation:** Ensure cross ventilation by opening windows and doors on opposite sides of a room or house/building during cooler times of the day. • **Cool air circulation from outside:** Watering your garden or pot plants during the early morning or evening can create a cooling effect as hot air that passes over the water loses its heat.	
Cooling indoors	The following features should be considered when renovating, building, or choosing the coolest room in the house: **Walls:** Natural materials (stone, timber, thatch and clay) work best to keep your home cool in summer, and mud bricks are an excellent source of insulation. **Floors:** Brick, tiles or concrete floors maintain comfortable temperatures in your home, as they absorb heat during the day and release heat at a slow rate during the night. **Roof:** Installing ceilings and insulation reduces the amount of heat transferred through the roof into the home.	**Energy efficiency in your home reduces generated heat** • Use energy-efficient lighting and appliances if possible. • Switch off lights and appliances when not needed. • Turn the geyser temperature down to 60 °C or completely off during very hot days or heat waves, or when you go away. • Smart cookers such as Wonderbags and Hotboxes are powerless and portable slow cookers that retain heat and allow food to continue cooking off the stove plate once brought to the boil. • Use pots with flat bottoms and tight-fitting lids and keep the lid on the pot when cooking. • Follow the guidelines in the Smart Cooking and Home Safety Guide for more tips including making your own smart cooker. • The smart cooker acts as an insulator and can therefore be used to keep items cold.
	Curtains • Blockout or semi blockout curtains are useful in blocking out the sun and can be purchased at any stores selling materials or curtains. • The colour and weave of the curtain impacts the amount of sunlight and heat that infiltrate the inside of a room. • The layering of curtains adds to the effectiveness of the curtain as the two layers contribute to the heat not transferring so easily to the inside of your room. • Curtains with linings are more effective to help reflect heat. This includes lighter lining facing outside.	**Blinds** • Blinds and roller blinds made of a heavier fabric will keep heat out, while a lighter colour will keep your space cooler more effectively because light colours reflect heat from the sun. Ensure that the blinds are closed when daytime temperatures start to increase. • Blinds such as those made from reeds, venetian blinds, louvered-type blinds, roller blinds, aluminium venetian blinds and wooden blinds are most effective at reducing heat gain.

Cooling option	Description	

Cooling outdoors	**Cooling your roof**
	
	• Apply roof paint that is designed to reduce heat gain.
	• To get a similar effect to the above, check that roof paint has a Solar Reflective Index (SRI) of 65% and above.
	• Remove dark objects from your roof and if possible, use white, light or pastel roof paint colours if you are not able to get a solar reflective paint.
	• Small and flat roofs can be shaded using thick shade nets or other thick fabrics. Corrugated iron roofs in particular should be covered with non-reflective material.
		Reduce heat transfer through windows with permanent or temporary external interventions.
		• Increase shade or block heat from the sun on the outside of the window, focusing on windows facing the sun:
		  ○ Install awnings or shutters over windows.
		  ○ Make your own version of shutters for the outside of windows.
		  ○ If mosquitoes cause you to close windows on summer nights, invest in screens.
		• The following items can be purchased from hardware stores to help absorb and block heat coming in: double-sided foil or heat-reflective aluminium foil, solar window film or sun block shade cloth.
		• If you are not able to afford any of the above, use old or unused household items such as thick pieces of cloth, items made of sail like material, large pieces of brown paper or bubble wrap which act as a heat insulator on windows.
		• Ensure that the above items do not obstruct the ability to open and close windows and that coverings can be removed quickly should you need to use the window as an escape route from a fire.
		• Ensure that materials are kept away from open flames and limit the spread of fires by not making fires outside your home on a very hot and/or windy day, and safely disposing of cigarette butts.

Greening	Follow the guidelines in Urban Green to find out more about creating and managing green spaces in your environment, neighbourhood and home. Read more about gardening and indigenous plant selections on page 131 of our Smart Living Handbook.	**Water-wise tree planting:** Follow the information in the Best Practice Guidelines for Trees to learn more about tree planting, maintenance, and which trees are more suitable to Cape Town's climate. Learn more about the value of planting Spekboom to help remove carbon dioxide in our Spekboom information booklet and booklet for kids. Apply to plant a tree from our Recreation and Parks Department.
	Location of greenery: Choose areas near the window or door to provide cooling or shade. Create cool outdoor spaces by planting in locations commonly used by the household during summer.	**Shading around windows:** Plant large shrubs to create shade around windows. If there is limited space, opt for planting in pots or other containers.
	Best vegetation options: Use indigenous plants, shrubs and trees that are drought resistant and indigenous. Water plants by prioritising the use of non-potable and grey water whenever possible.	**Green walls:** A green facade is a type of vertical garden installed on or against the wall of a building or structure that helps reduce heat transfer through the walls into the home. A facade consists of a support structure (trellis-type structure) with plants that are 'trained' to climb and grow upwards. Placing pot plants on a flat roof and along the walls can create a heat-resilient barrier, helping the household maintain ambient indoor temperature.

Cooling option	Description	
	Saving and creating space: To create a façade, plants can be planted directly in the ground along the wall if there is space, or planted in pots or other containers such as empty coffee cans, bottom halves of plastic bottles, bags, etc. Create pockets of small green spaces by removing pieces of paving or cement from the ground and replacing with plants.	**Cool outdoor walls:** Tiles against walls or vibracrete in an outdoor space can contribute to heat transfer or reflection of heat in the specific space. If possible, use recycled tiles. **Paving and stones:** Prioritise light-coloured paving material and note that stones also tend to stay warm until deep into the night, reflecting heat back into the air.
	Container garden: Consider container planting on your windowsill, balcony or even your roof (if it is flat and protected). Larger containers can also accommodate herbs and some food plants (such as tomatoes).	**Green roof for informal settlements and homes in backyards:** Where possible, vegetation can be cultivated on a flat roof in pots, wooden crates, grow bags or other containers suitable for a roof.
Shading	• If you do not have a permanent shading or canopy structures outside, temporary outdoor canopies can be created/built using a piece of thick cloth, old sheets, shade nets, or sail-type material. • Construct a garden arbor using new/used outdoor building/construction material, and let plants grow over it to create shade. • Construct a structure similar to pergolas that can be draped in old pieces of thick material, wooden pieces or branches of trees that have been trimmed. • Recycle large, broken or unused old beach umbrellas to create outdoor shading.	

Summarised and adapted from the City of Cape Town Household Heat Adaptation Guidelines (unpublished, 2024) and the City of Cape Town Smart Living Handbook.