



1. DESIGN FOR INTERGRATION

DESIGN INTENT

As children grow they move through different phases in their lives. The intent of this design is to stimulate growth through integrated design to inspire the adventure of learning. Our concept enhances communication and collaboration between students, teachers and the environment. These three levels are addressed in the seamless connection between indoor and outdoor safe spaces, that promote individualism and creativity.

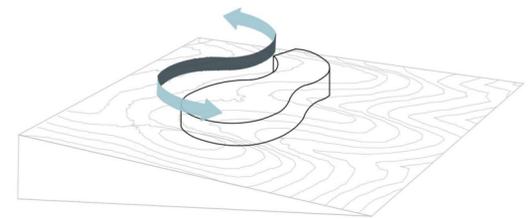
LOCATION



CLIMATE

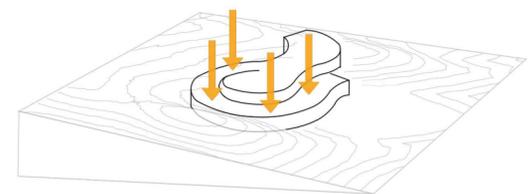
Ground Snow Load: 38 PSF (2015)
 Wind Load: 90 MPH/3 sec.
 Wind Exposure: C, Open terrain with scattered obstructions.
 Winter Design Temp.: 10 Degrees F
 Average annual snowfall – 46 inches
 Average annual high temperature – 59.3 Degrees F
 Average annual low temperature – 36.3 Degrees F
 Average 169 sunny days per year

FORM FINDING



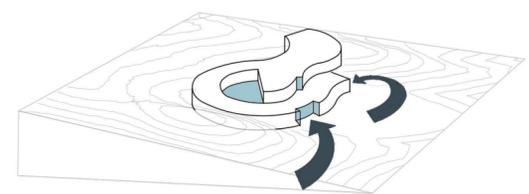
SHAPE INSPIRED BY LANDSCAPE

Shape inspired by the topographic lines of the original landscape



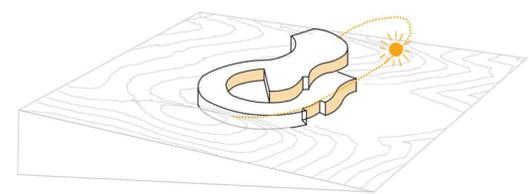
LANDSCAPE INTEGRATION

The building is set into the ground on the first floor, with a series of ramps moving up along the topography to connect to the second floor.



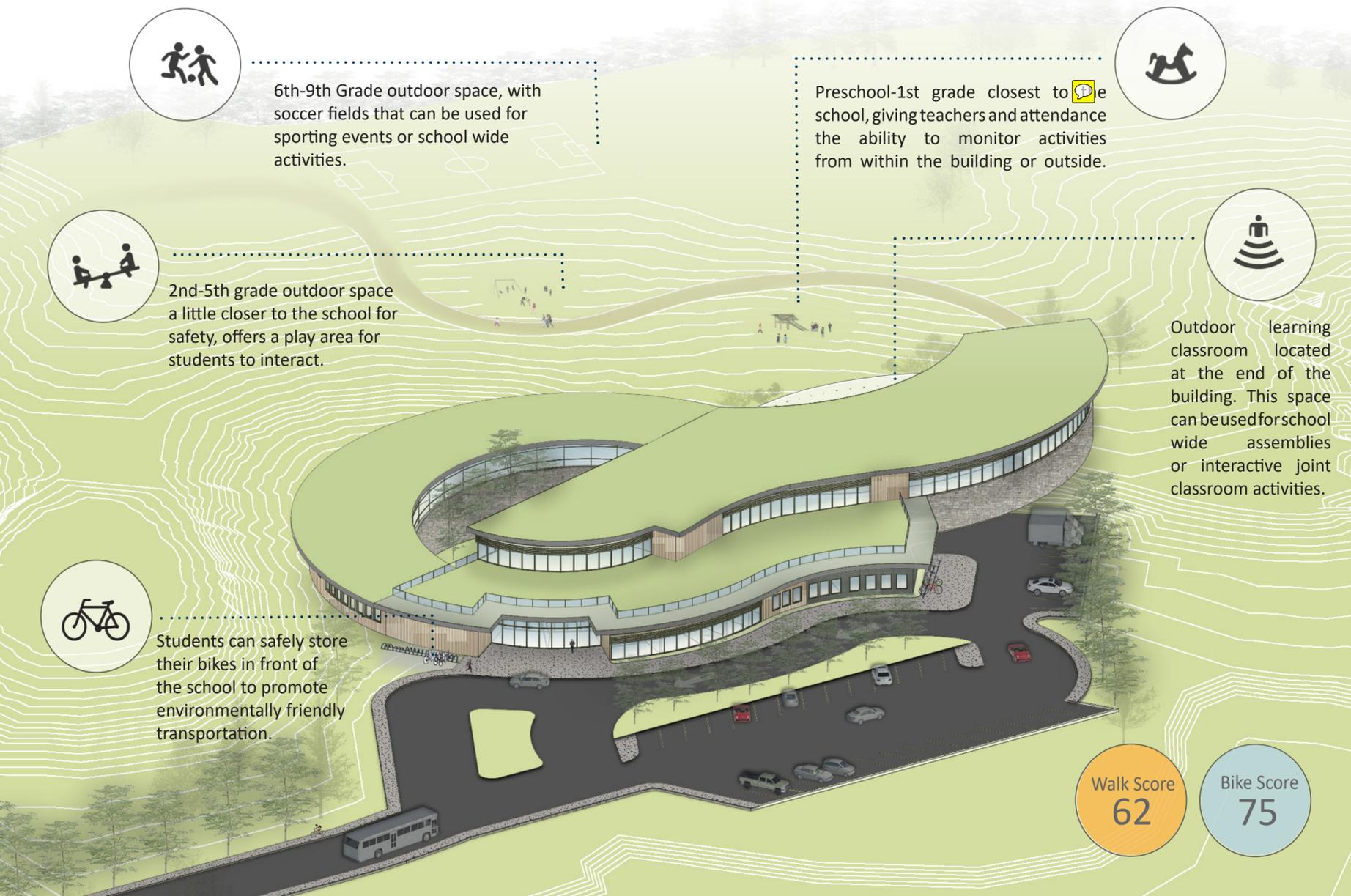
ENTRANCE

The main entrance is only visible from the south side of the site, giving it a natural barrier from the residential neighborhood to the north.



ORIENTATION

Glass curtain walls line the south facing facade, to allow for natural daylighting to reach every classroom.





VIEW OF RAMP INTO COURTYARD

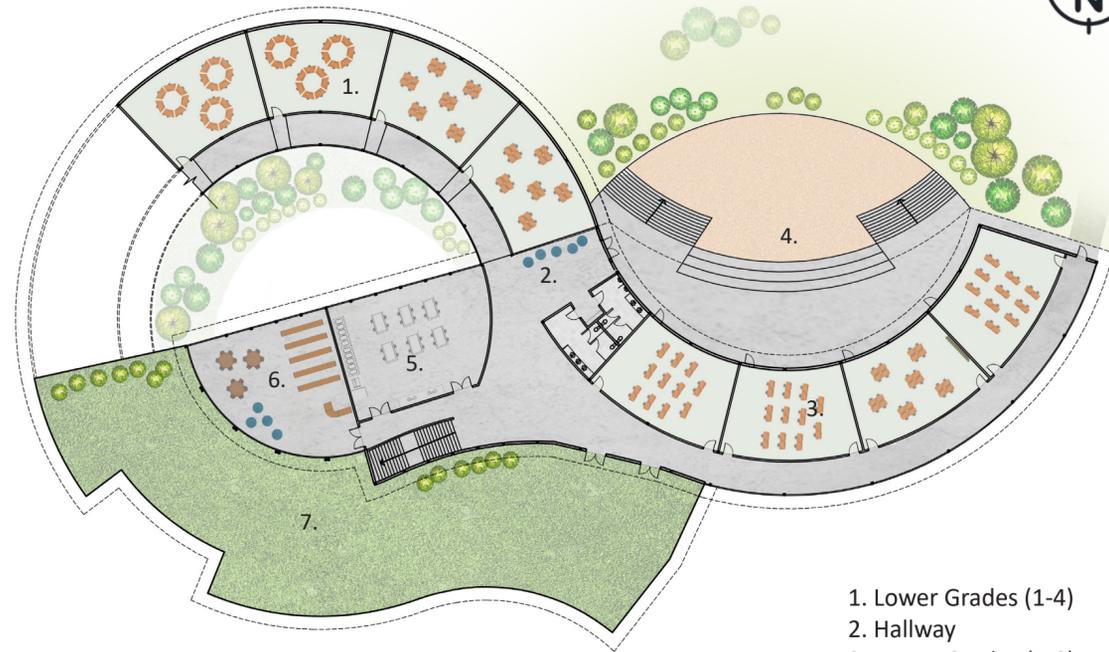


MULTIPURPOSE ROOM



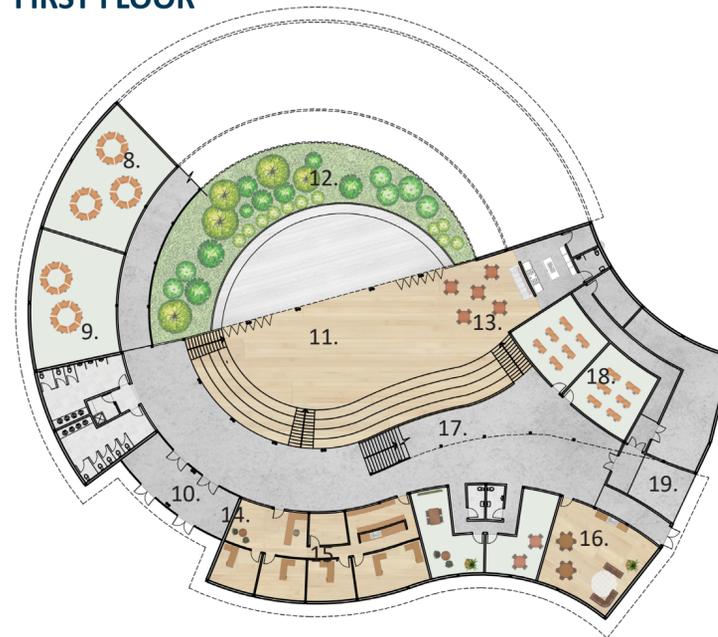
INTERIOR 7TH GRADE CLASSROOM

SECOND FLOOR



1. Lower Grades (1-4)
2. Hallway
3. Upper Grades (5-8)
4. Outside Assembly Area
5. Science Lab.
6. Library
7. Garden Roof

FIRST FLOOR

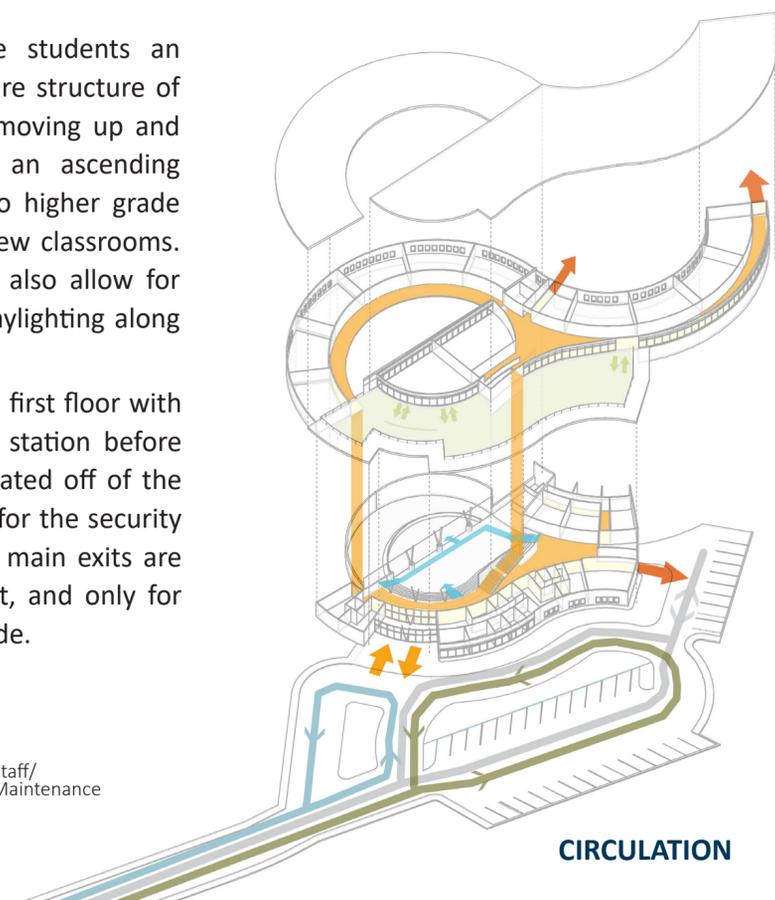


8. Kindergarten
9. Preschool
10. Main Entrance/Exit
11. Multipurpose room/
Assembly Area
12. Atrium
13. Cafeteria
14. Checkin desk
15. Admin area
16. Office Lounge
17. Reading area
18. Behavioral/Flex Room
19. Service Delivery Room

7. DESIGN FOR WELLNESS

This building is designed to give students an opportunity for adventure. The entire structure of the building is a system of ramps moving up and throughout the building creating an ascending element. As the students ascend to higher grade levels they move up the ramp to new classrooms. The classrooms and meeting areas also allow for views of the Palouse and natural daylighting along with an open courtyard.

The main entrance is located on the first floor with two sets of doors with a check in station before the second set of doors. This is located off of the Administration area of the building for the security of the students and staff. All other main exits are only accessible from the inside-out, and only for those with a key card from the outside.



CIRCULATION

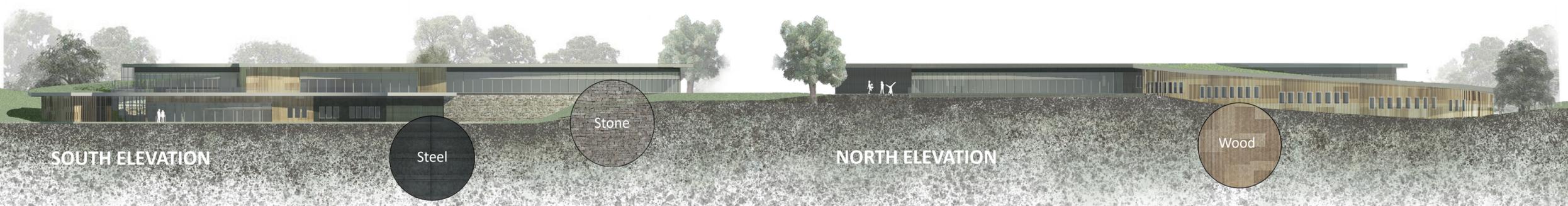
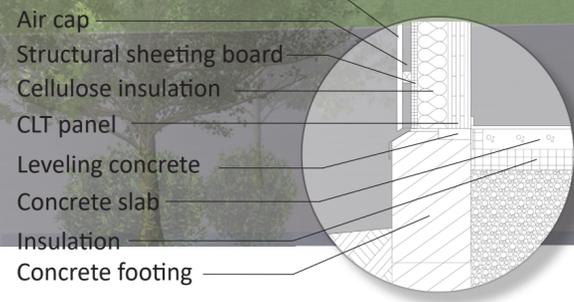
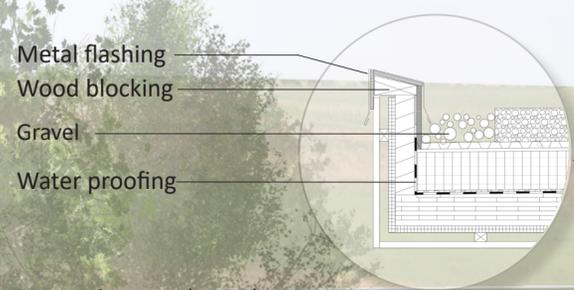
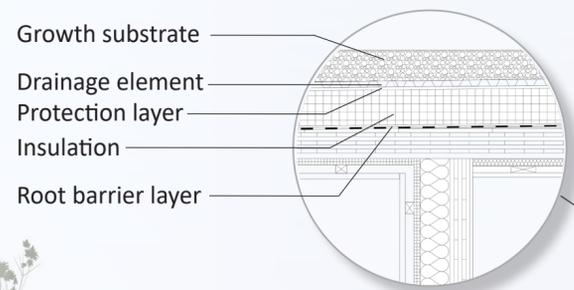
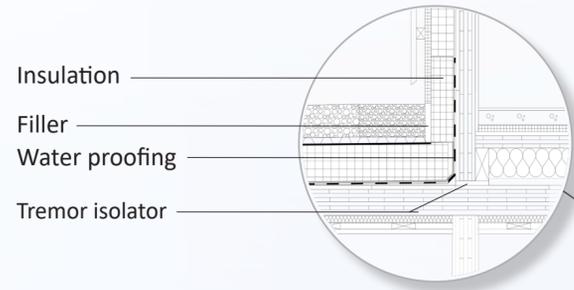
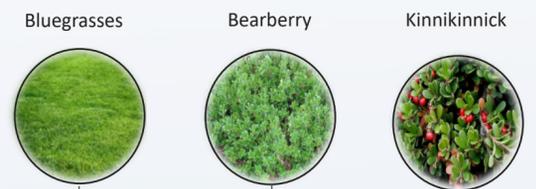


NORTH OUTDOOR ASSEMBLY AREA

STRUCTURE

The structure of the building is an affordable post and beam system, using locally sourced wood materials. The walls, floors and ceiling are made up of structural CLT panels, with 12" cellulose insulation. With concret slab-on-grade flooring. All these materials reduce the carbon footprint of the building.

The windows offer double paned glass, to reduce solar gain. Since the south side of the building mostly consists of glass 40% of the windows are fritted to reduce glare and to deter wild life from hitting them.



SOUTH ELEVATION

NORTH ELEVATION

7. DESIGN FOR RESOURCES

Natural daylighting plays a large role in the efficiency of the building. With classrooms offering filtered sunlight for every room, teachers and students will be able to utilize learning spaces. The site also features a network of bioswales to filter excess storm water runoff from the roof and parking lot. The drainage on the building directly runs into an existing water system at the base of the site, reducing the need for any additional water systems.

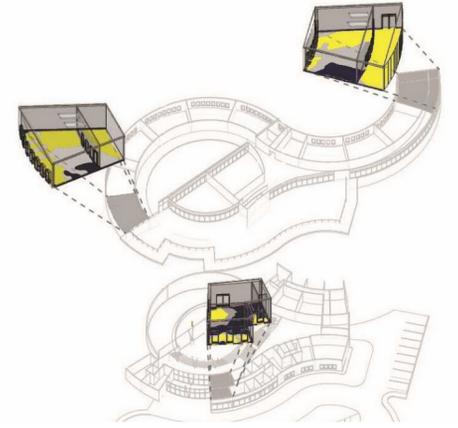
The rainwater that is collected and filtered from the roof is being stored in the underground 65,000 gallon cistern, to be reused as greywater for the low flow toilets. Any excess water is then used as irrigation on the site to return water into the natural system.

The PVs located on the second floor roof will generate 430,740 KWH/year generating more than a half of the needed energy for the building.

SEFAIRA MODEL

This model shows our east and west facing classrooms are well lit by natural daylighting.

Total floor area: **37,734 sq/ft**



WATER
Water collection system from the roof for the reuse of grey water. Cistern tank size for collection for offseason storage, and occupancy levels. For use in low flow toilets.

ECOSYSTEM SUPPORT
Courtyard with natural vegetation and green roof with native flora.

WIND
Open air opportunities, and operable windows for natural cross ventilation coming from Southwest wind

PV PANELS
Panels designed to gain solar energy through sun rays, to be used to generate energy for the building.

DAYLIGHTING
Double skin, fritted glass south facing for natural daylighting exposure with controlled solar gain. Shading devices for protection from the direct sunrays.

HEATING AND COOLING
Geothermal in floor heating for heating and cooling.

BIOSWALE
Bioswale located on front of the building to collect runoff from parking lot, and filter water before it can be reused as grey water.

GREENROOF OUTDOORSPACE FOR ALL SEASONS

