# AN INTRODUCTION TO GREEN ROOFS





### WHY GREEN ROOFS?

There are many economic and ecological reasons for green roofs:

- Improving air quality by absorbing greenhouse gases.
- Absorbing sunlight (urban heat island effect).
- Reducing cooling and heating costs for your building.
- Capturing and helping manage storm water (stormwater management).
- · Reconnecting humans with nature.

After all, Greener Cities are Healthier Cities!

### **INSTALLATION NOTES**

- · Observe local Codes and Guidelines.
- Strictly follow the correct sequence of layers and accessories.
- Fall protection is necessary during any type of construction or maintenance.
- Roof surface must be clean and free from any kind of damage or leaks.
- Do not overload the roof by storing excessive material.
- Do not cut on the waterproofing membrane.

## ZINCO GREEN ROOFS – THE SKY IS THE LIMIT!

Ever since its inception in 1957, ZinCo has been committed to incorporating nature back into the urban landscape. Green roofs that will work to offset the environmental impact of building structures for decades to come.

This document is to give guidance when designing a green roof system. ZinCo green roof systems are applicable for many roof structures when taking into account construction guidelines, project specifics and horticultural information.

The ZinCo approach offers 'built in place' assemblies in superior quality and performance in arid, tropical, Mediterranean, temperate and subarctic conditions. For further information, please contact your local ARDEX account manager.

### KEY FACTORS FOR A SUSTAINABLE GREEN ROOF SYSTEM

- Roof construction, sun exposure, wind, load, connecting heights, slope, drainage, fire, design rainfall, temperature, etc.
- Choice of project-specific green roof system build-up (no one-size-fitsall approach).
- Irrigation, certainly in sloped conditions, is no luxury, but a necessity when precipitation distribution is uneven throughout the year.
- Working with biodiversity modules may allow using and establishing regional or possibly endemic flora and fauna.
- Roof gardens will always require periodic or regular maintenance. There is no such thing as a maintenance-free green roof.
- Do not forget the root proof layer. It creates an impenetrable protective barrier for the roofing membrane against damaging root and rhizome systems.
- Green roof growing media is an integral part of the success of the green roof system. It must retain and drain water, provide root space for the vegetation and have nutrients readily available in.

#### CONCLUSION

A well designed, properly installed and regularly maintained green roof can easily last the lifetime of the building. Green roofs are a wonderful design element in urban settings and also great for the environment. For more information please visit: zinco-greenroof.com



