

Data centers are mission critical facilities that run operations with profound significance. They are prevalent in industries including healthcare, telecommunications and information technology, BFSI, government and public sector, energy, and many more. Businesses and infrastructures rely on these data centers to store sensitive data and support mission critical applications.

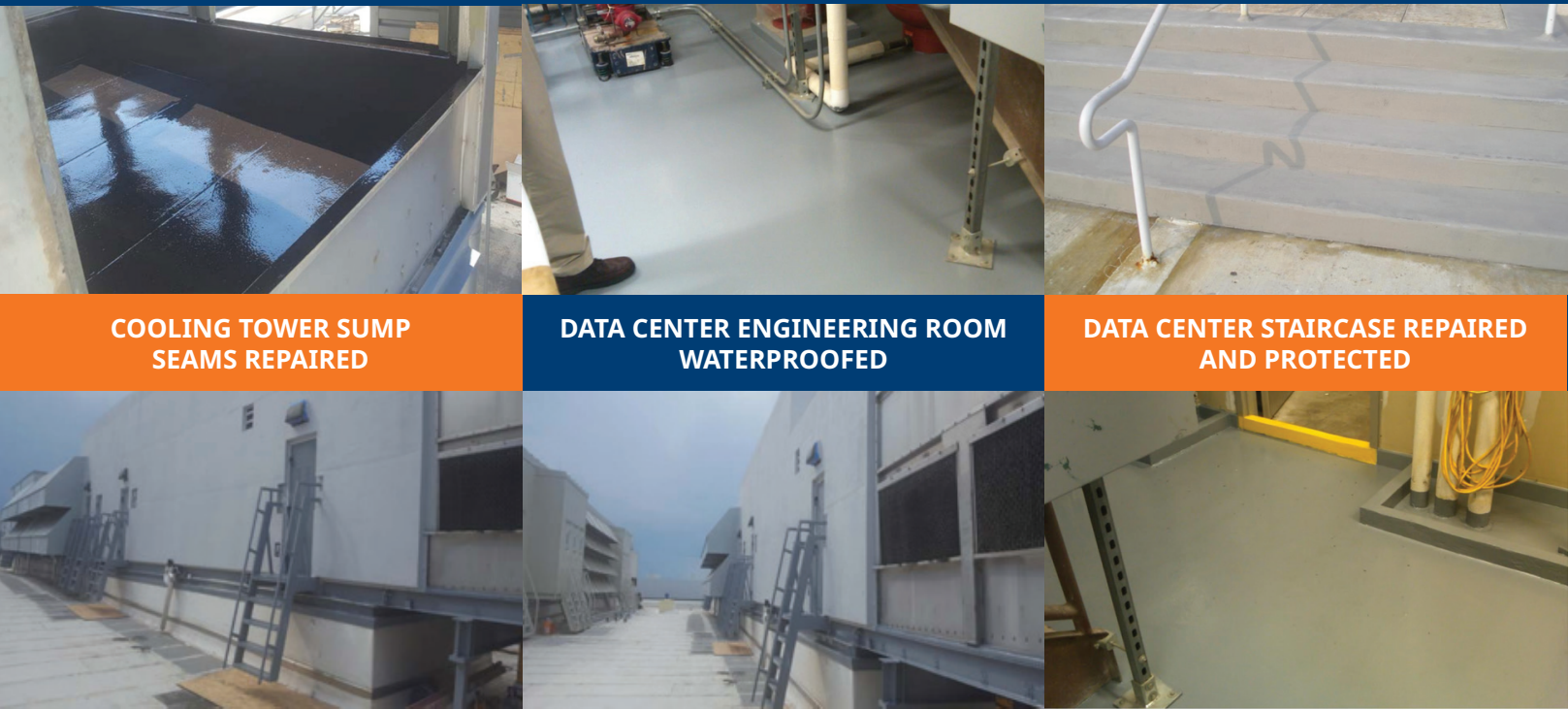
The continuous operation of these facilities in these industries is critical and unplanned downtimes are costly. Therefore, there is a need to protect these data centers. Polymeric technology can offer solutions to these facilities and allow them to continue their critical operation across various industries.

Belzona has been showing success and reliability in the repair, maintenance and safety of the data center facilities in the areas including but not limited to:

- Roofs and Roofing Elements*
- Skylights, gutters, and parapet walls
 - Walls
 - Floors, stairs, ramps, parking lots, sidewalks, and entryways

- HVAC*
- Heat exchangers, air handlers, diesel engines, fans, pumps, condensers, generators, compressors, cooling towers, and ductwork
 - Pipes and pipework

- Power Generation*
- Generators and transformers
 - Curbside Appeal



COOLING TOWER SUMP SEAMS REPAIRED

DATA CENTER ENGINEERING ROOM WATERPROOFED

DATA CENTER STAIRCASE REPAIRED AND PROTECTED

INSULATION ON STEEL STRUCTURES INSTALLED AND ENCAPSULATED

DATA CENTER THRESHOLD INSTALLATION



Belzona Is a Global Manufacturer of Repair Composite Materials & Industrial Coatings.



Visit us and check out our solutions



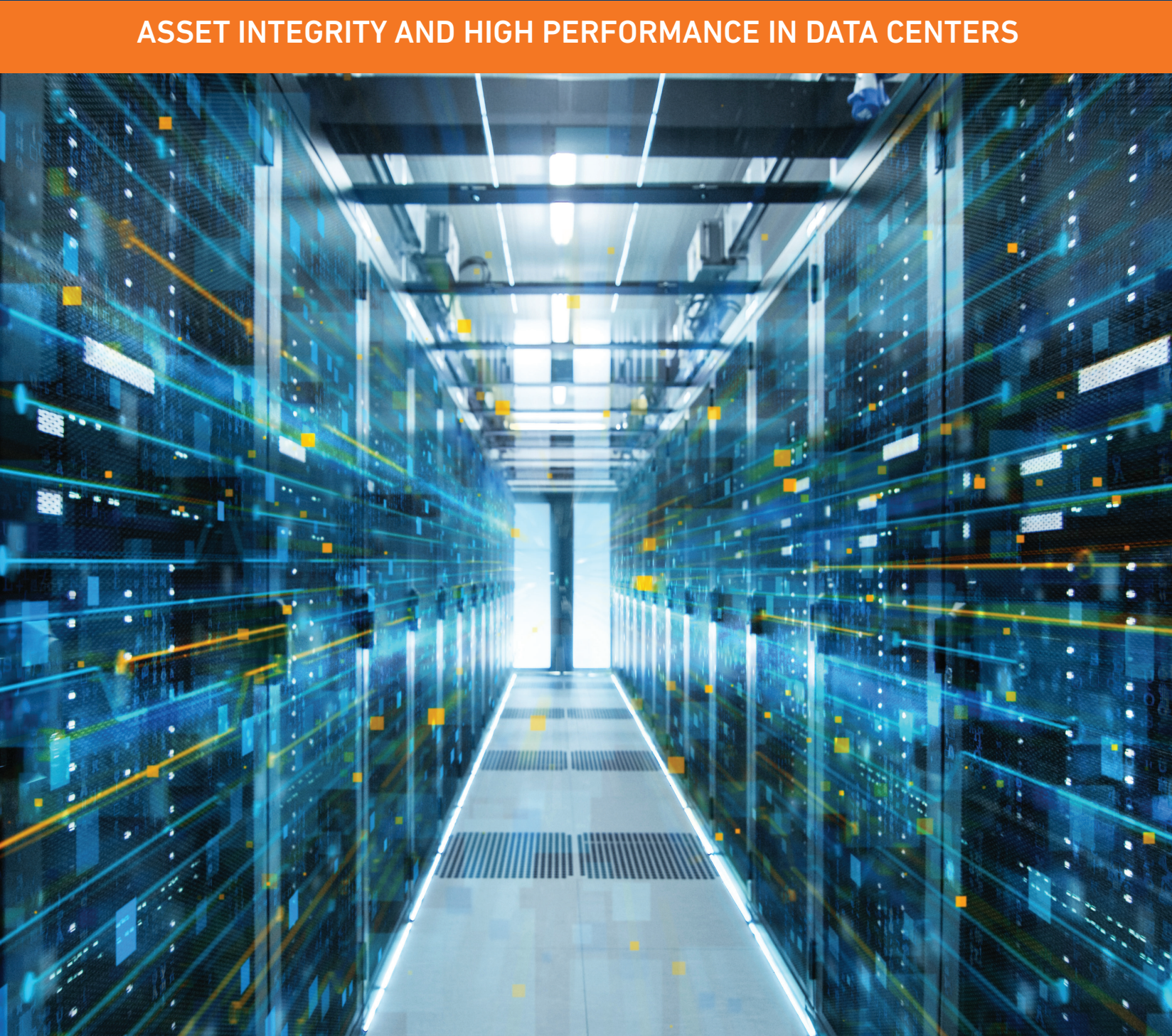
For more information, please contact your local Belzona® representative:

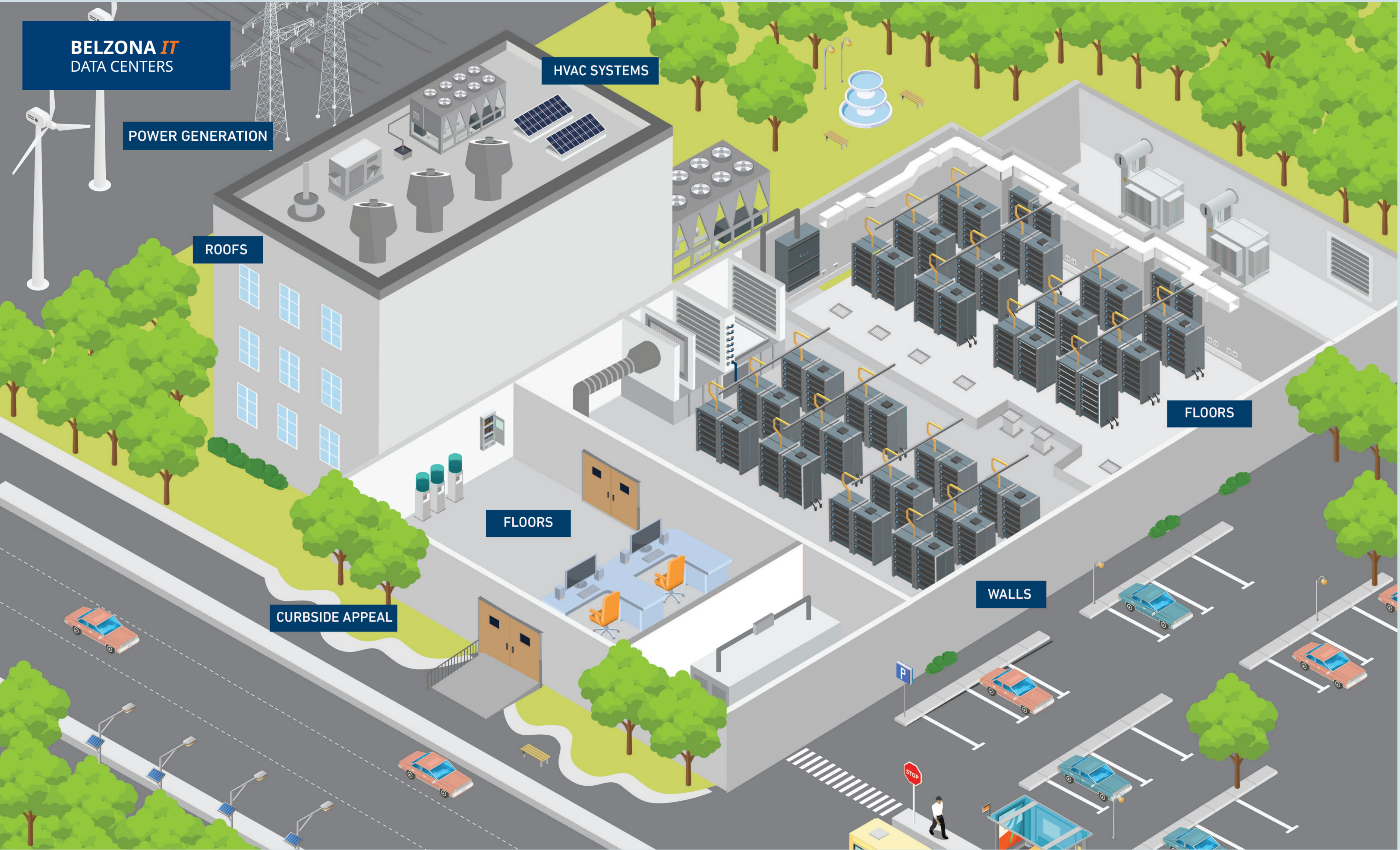


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This diagram of a typical data center facility is designed based upon data retrieved from various sources. It is to be used as general guidance only. It describes the most common repair and maintenance problems found in data center facilities together with Belzona solutions which could potentially help mitigate such problems. It does not aim to supersede any drafted process flow charts in use at these facilities. It is strongly recommended that each user of this guide contact the local Belzona representative to discuss the specific needs and operation conditions of their data center facility.

ROOFS

TYPICAL PROBLEMS: Weathering and/or physical damage to roofs and roof parts: joints, seams, edges, glazing sections, gutters, flashings, skylights, parapet walls and copings, pipes and pipe supports. The damage is typically caused by weather and freeze-thaw cycles, failure of roof materials, substrate movement or impact.

POTENTIAL SOLUTIONS: Belzona 3000 series fluid-grade membranes for weatherproofing, waterproofing, repair and protection of all roof types and roof parts.

WALLS

TYPICAL PROBLEMS: Deterioration of concrete and stonework, and construction joints failure due to erosion, corrosion, chemical attack, physical impact, and structural movement.

POTENTIAL SOLUTIONS: Belzona 2000, 4000 and 5000 series paste and fluid grade materials for waterproofing, concrete and stonework rebuilding and protection of the external and internal walls, and for the repair, replacement or installation of construction joints.

FLOORS

TYPICAL PROBLEMS: Damage of concrete floors due to heavy racking and equipment in server rooms, aged flooring, weather/temperature fluctuations, physical impact, slippery flooring areas, expansion joints failure, uneven threshold transit areas.

POTENTIAL SOLUTIONS: Belzona 1000, 2000, 4000, and 5000 series paste- and fluid-grade materials for installation of heavy-duty concrete flooring in server rooms and non-skid, slip-resistant flooring throughout the facility, safety markings, expansion joints repairs, sealing floor drains, repairing threshold transition areas.

HVAC SYSTEMS

TYPICAL PROBLEMS: Erosion-corrosion damage to components of HVAC units.

POTENTIAL SOLUTIONS: Belzona 1000 and 2000 series paste- and fluid-grade materials for metal rebuilding and erosion-corrosion protection of air handlers, diesel engines, fans, pumps, condensers, generators, compressors, cooling fans, cooling pans, chiller tubesheets, leaks and drains sealing.

PLUMBING AND PIPEWORK

TYPICAL PROBLEMS: Erosion-corrosion and chemical attack related to the use of water filtration chemicals: chlorine, charcoal, water softeners on pipes, pipework, pumps, filtration systems and storage tanks.

POTENTIAL SOLUTIONS: Belzona 1000 series paste- and fluid-grade materials for metal rebuild and corrosion protection of the pipes, pipework and storage tanks. Belzona 5000 series fluid grade materials for the chemical resistance in chemical containment areas and corrosion protection of (non) potable water storage tanks and pipes.

POWER GENERATION

TYPICAL PROBLEMS: Mostly corrosion problems related to elevated pressure and temperature on boilers, steam turbines, heat exchangers, and pipework

POTENTIAL SOLUTIONS: Belzona 1000 and 5000 series paste- and fluid-grade materials for metal rebuild and erosion-corrosion protection on solar panels, transformers, generators. Belzona 6111 fluid-grade material for the cathodic protection on solar panels supports and other metallic structures.

CURBSIDE APPEAL

TYPICAL PROBLEMS: Concrete damage due to weather fluctuations, freeze-thaw cycle, physical impact.

POTENTIAL SOLUTIONS: Belzona 4000 and 5000 series paste- and fluid-grade materials for the concrete restoration and protection on decorative structures and bases (fountains, waterfalls and monuments) concrete levelling, floor protection and slip-resistance on pedestrian walkways and at the base and around stop bollards and other safety structures.