



BETTER SOLUTIONS FOR CONCRETE FLOORS

FIRRMSS

Floor Inspection, Repair, Renovation,
Maintenance and Safety Solutions



www.concreteflooring.co.za



CLF is a leading industrial concrete flooring contractor in South Africa specialising in the design and construction of new industrial concrete floors, and also very strongly engaged in the renovation and preservation of existing industrial concrete floors across the African continent. Industrial concrete flooring within the warehousing and distribution sector has become highly specialised in recent years. The engineering specifications and tolerances associated with these floors have become so onerous and technical that they need to be constructed and maintained in a specific and specialised manner. From how they are designed to how they are maintained and nurtured over their life span, industrial concrete floors need qualified specialist attention. The upkeep of the concrete floor in any warehouse, distribution centre or logistics/supply chain hub is absolutely critical to the return on investment for the owner/developer and to the operational efficiency of the tenant/user. Furthermore there has been a growing trend within the sector to rehabilitate and renovate existing facilities rather than developing new ones.

Floor deficiencies have greatly contributed to the following productivity draining factors in most operational facilities:

- An overall slow down in vehicle flow
- Costly detours to avoid impact
- Damage to transmissions, axles, sensitive computer equipment
- Excessive wheel/tyre wear
- Vibratory loosening of wires/cables
- Load tipping
- Workman's compensation claims, particularly lower back issues
- Decline in vehicle operator morale
- Under loading for fear of load tipping

CLF are perfectly positioned to provide full turnkey solutions, not only for the design and installation of concrete floors, but also for the repair, renovation and rehabilitation of existing facility floors.

Load Tipping



FIRRMSS – Floor Inspection, Repair, Renovation, Maintenance and Safety Solutions

FIRRMSS is used all over the continent by leading multinationals. Damaged floors, particularly **damaged joints in floors**, are a nightmare for facility owners and floor users as they damage wheels and systems of forklifts and cause other major operational problems.

Our specialist services offer the client maximum flexibility, allowing:

- Selection of solutions to meet client needs and budget
- Long or short term repair programmes can be implemented
- Multi-facility or single facility implementation

CLF handles everything from analysis to completion.

Our solutions include 24 hour joint rehabilitation, injection grouting, grinding to improve levels, application of self level screeds for super flat tolerances, crack repair and a full range of other specialist repair solutions. Our experienced teams use state of the art products sourced from all over the world that allow rapid repair, ensuring minimum operational downtime for the users. We also provide full facility floor maintenance which allows us to look after your floor on an on-going basis to ensure long term asset protection and preservation. Below is an overview of some common problems and our solutions.

Damaged External Paving



Forklift Wheel Replacement

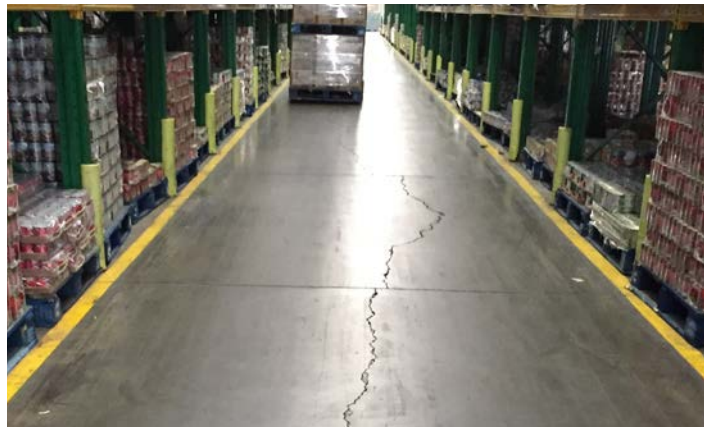


Repair solutions

We undertake specialist repair work to common joint and surface issues which includes crack repairs, joint repairs, joint edge rebuilds, corner joint repairs, patch repairs, floor level and flatness repairs, injection grouting to rocking panels, bolt hole repairs, surface delamination repairs and rocking aggregate repairs.

Freezer facilities and the repair of these floors is challenging because of the extremely low temperatures. We are able to undertake quick turnaround, specialist repairs in freezers at sub zero temperatures to ensure minimum disruption to operations.

Cracks



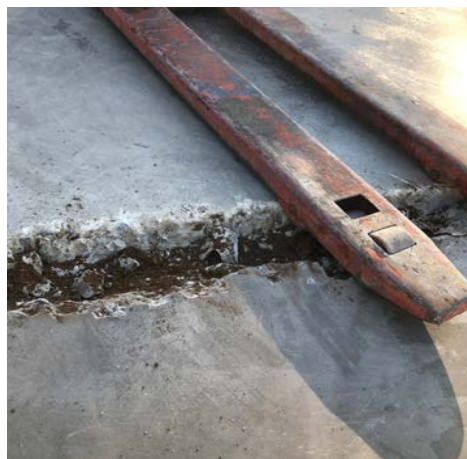
Freezer Surface Repairs -30°C



Freezer Aisle Refurbishment -30°C



Joint Repairs



Crack Repairs using needle injection



Delamination Repairs



Patch Repairs



Corner Rebuilds



Level and Flatness upgrades according to TR34 & Refurbishments to old floors



Concrete coring and cutting solutions

CLF specialises in concrete coring and cutting

Concrete coring – removal of a concrete cylinder from a structure – is achieved by high speed diamond segmented barrels that drill circular holes in concrete. Required for a variety of applications (pipes, wires, utility lines) as well as core samples for analysis.

Very cost effective and efficient

Concrete cutting achieves very clean and precise cut edges ensuring no further structural damage. Our cutting services include:

- Expansion joints: create expansion joints in slabs to control cracking due to thermal expansion and contraction.
- Renovations and modifications: In construction, concrete cutting allows for the removal of sections or openings to accommodate structural changes, utilities, or design alterations.

Concrete coring



Concrete cutting



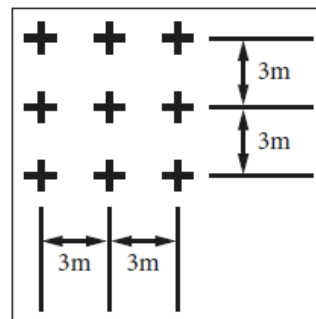
Floor coating and polishing solutions

We offer a variety of floor coatings to meet the needs of a broad spectrum of users including companies involved in health care, food and beverage operations, automotive facilities and packaging facilities. Our offering includes epoxy coatings, polyurethane coatings, chemical coatings and electrostatic coatings. We also undertake the demarcation, signage and line marking needs of any facility requiring compliance with the health and safety aspects of their operation. We also undertake 7 stage diamond polishing to concrete floors that offers a durable and elegant surface.



Floor surveying and tolerance compliance solutions

Companies are needing higher efficiencies and more and more pallet storage space in their facilities and often select higher racking and narrower aisles – all requiring flatter floor specifications and tolerances. CLF has developed proprietary innovative and independently certified equipment – the RACKTRACK to measure DM (Defined movement narrow aisle) tolerances and the GRIDTRACK to measure FM (Free Movement) tolerances and provide accurate surveys and reports to ensure that the specified floor tolerances according to the UK Concrete Society TR 34 4th Edition are complied with.



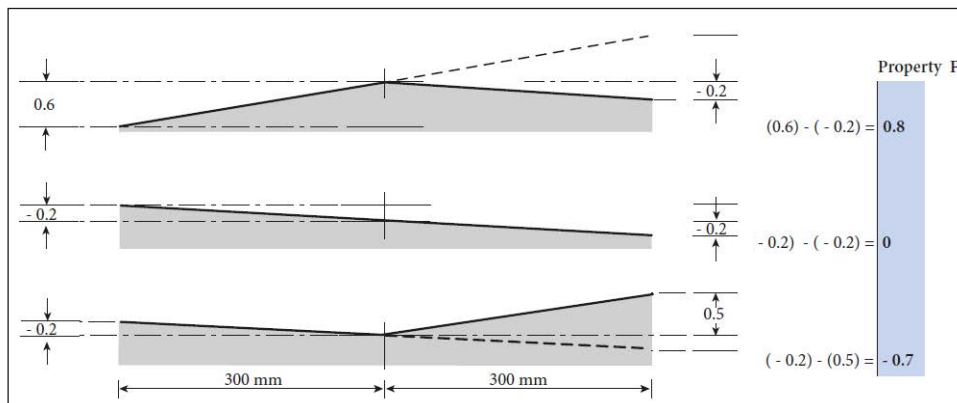
Property E

CLF also uses this equipment in refurbishment projects when converting old facility floors to state of the art superflat floors.

Racktrack



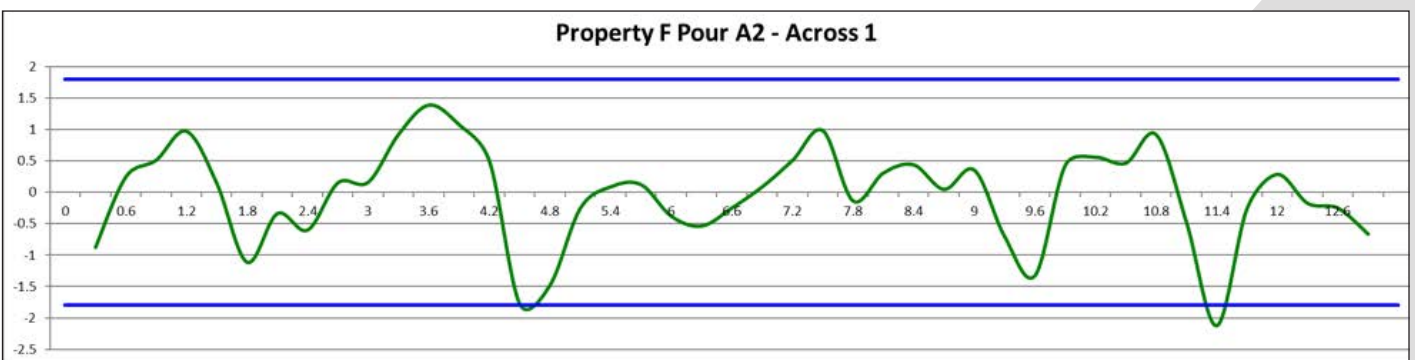
Gridtrack



...	...	...	...	...	...
...	-1.5	1.5	-3.0	2.5	-5.5
...	-1.0		-2.5		0.0
...	-2.5	3.0	-5.5	0.0	-5.5
...	3.0		-1.0		0.5
...	0.5	7.0	-6.5	-1.5	-5.0
...	0.0		4.5		2.5
...	0.5	2.5	-2.0	0.5	-2.5
...	-3.0		2.5		1.0
...	-2.5	-3.0	0.5	2.0	-1.5
...	0.0		-1.5		-3.0
...	-2.5	-1.5	-1.0	3.5	-4.5
...	0.5		1.5		3.0
...	-2.0	-2.5	0.5	2.0	-1.5

Property E

Property F



Floor renovation solutions

With owners of industrial facilities often opting for the rehabilitation of existing facilities rather than developing a new facility from scratch, we offer a range of solutions to assist in the renovation of such facilities. Over and above our remedial repair solutions we further include:

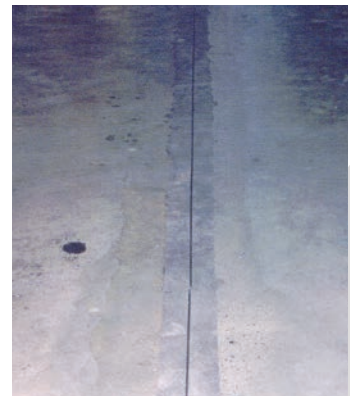
- Floor grinding and polishing
- Seal and shine solutions
- Self levelling screed applications
- Floor coatings
- Proprietary Floor Reviva which rejuvenates marked and stained surfaces.



Maintenance solutions

Typically a developer/owner of a facility will structure a project around a 20 to 25 year lifespan at an acceptable yield over the term. The tenant/user of the concrete floor will sign a lease over a specific term with the intention of maximising operational return during that period. This lease will in most cases be a triple net lease meaning that the user is responsible for keeping the floor fit for purpose over the term of the lease. In both instances above, the performance and sustainability of the floor becomes critical. However, all too often, tenants are so focused on their own operational profitability that the floor upkeep tends to be overlooked until the end of the lease, arising in tension and ultimately significant cost.

FIRRMSS addresses the need for continuous, hands on preservation and upkeep of floors. This ensures that both parties involved have peace of mind, knowing that the concrete floors are kept in a fit for purpose condition at all times – allowing for maximised operational efficiency for the user and capital preservation for the owner.



Safety Solutions

Safety Floor markings have become an additional offering by CLF having seen how vital they are to warehouse operations where pedestrians and vehicles interact and now also a requirement by the Occupational Health and Safety Act.



CAUTION
Forklift trucks operating



**PERSONAL PROTECTIVE
EQUIPMENT**
Required beyond this point



CCTV in operation



**No admittance –
Authorised personnel only**



Keep this premises tidy



**No eating or drinking
in this area**

Health and safety line markings are visual indicators, such as painted lines or durable tape, applied to floors in environments like warehouses and factories to designate safety zones, highlight hazards, direct traffic, and ensure compliance with safety regulations.

Why Line Markings Are Essential:

- Prevents Accidents
- Highlights Hazards
- Enhances Efficiency
- Ensures Organization and Clear Navigation
- Supports Emergency Preparedness
- Ensures Regulatory Compliance





Please contact us should you require any further information.

Detailed service offerings and technical downloads are available on our website
www.concreteflooring.co.za

We look forward to assisting you with your concrete flooring requirements.



BETTER SOLUTIONS FOR CONCRETE FLOORS

Johannesburg / Africa / International

TEL: +27 11 704 5557

CELL: 083 378 5579

EMAIL: info@concreteflooring.co.za
nic@concreteflooring.co.za

Western & Eastern Cape

CELL: 082 605 9416

EMAIL: angus@concreteflooring.co.za

KwaZulu-Natal

TEL: +27 60 898 3600

CELL: 082 908 9771

EMAIL: lance@concreteflooring.co.za

The information given is based on knowledge and performance of the material. Every precaution is taken in the manufacture of the product and the responsibility is limited to the quality of supplies, with no guarantee of results in the field as CLF – Concrete Laser Flooring (Pty) Ltd has no control over site conditions or execution of works. Should CLF undertake the work as advertised in the FIRRMS Brochure the work is fully guaranteed and all product and workmanship is fully insured. See CLF (Pty) Ltd Standard Terms and Conditions.

www.concreteflooring.co.za