



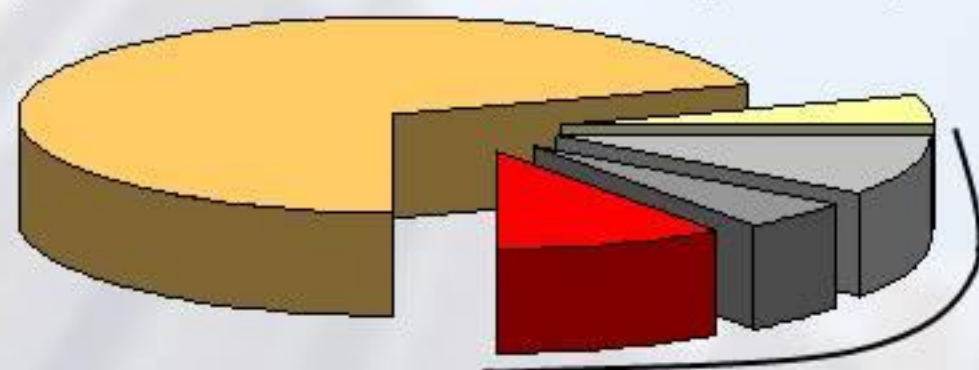
Seminar on Safe Hoisting Operations - Tower Crane and Mobile Crane

**Sharing PASS Observations
Mr. Alan Hui, Housing Department
1 April 2008**



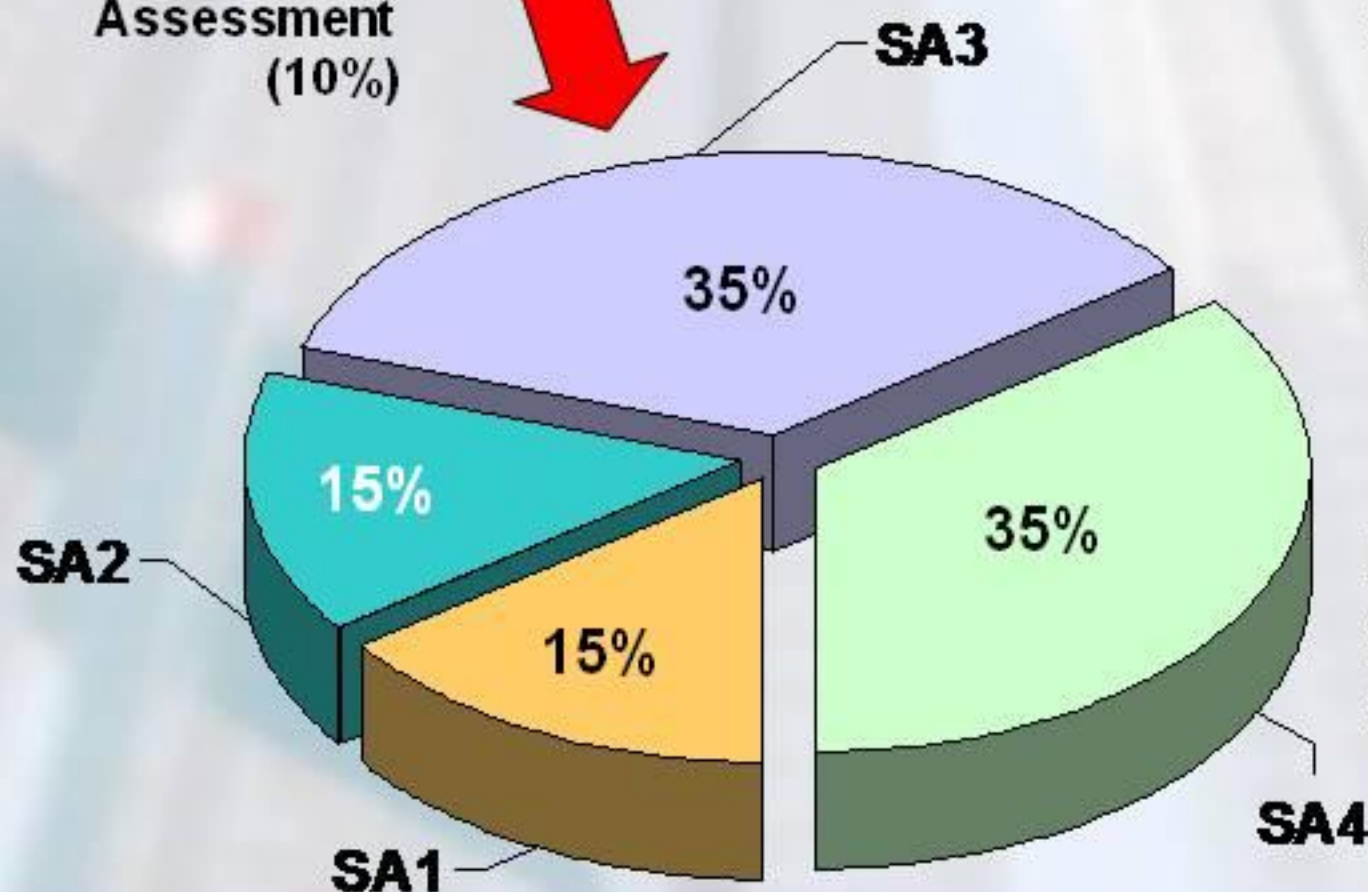
PASS – Safety Assessment

Output Assessment (70%)



Input Assessment (30%)

Safety
Assessment
(10%)



By OSHC

SA1 - HASAS score for
Safety & Health
Management System

SA2 - HASAS score for
Implementation of the
Safety & Health Plan

By HD

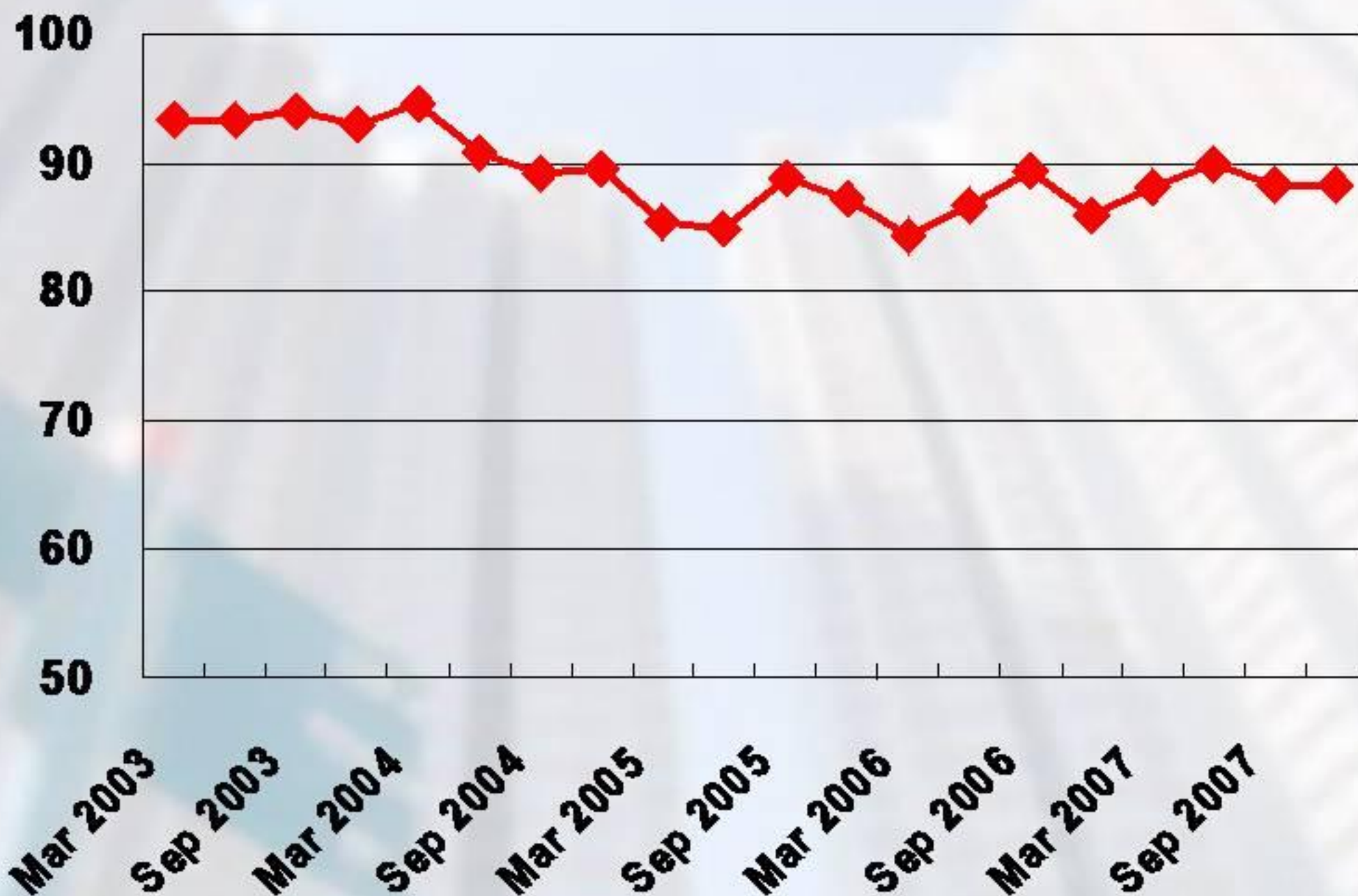
SA3 - General Site Safety

SA4 - Block Related Safety



PASS – Safety Assessment

Average Safety Score

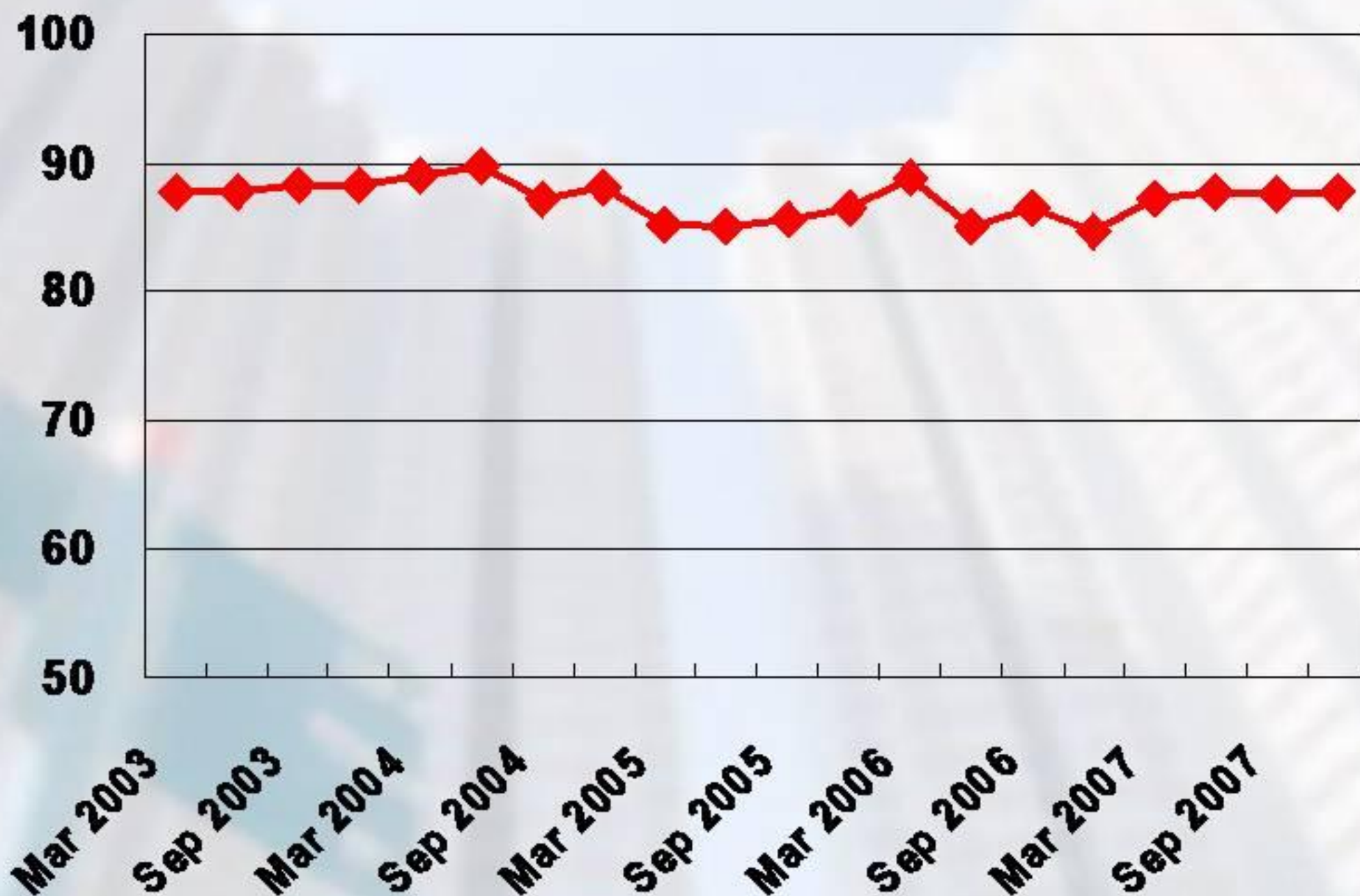




PASS – Safety Assessment

Average Safety Score

(Factor : SA1 - HASAS score for Safety & Health Management System)

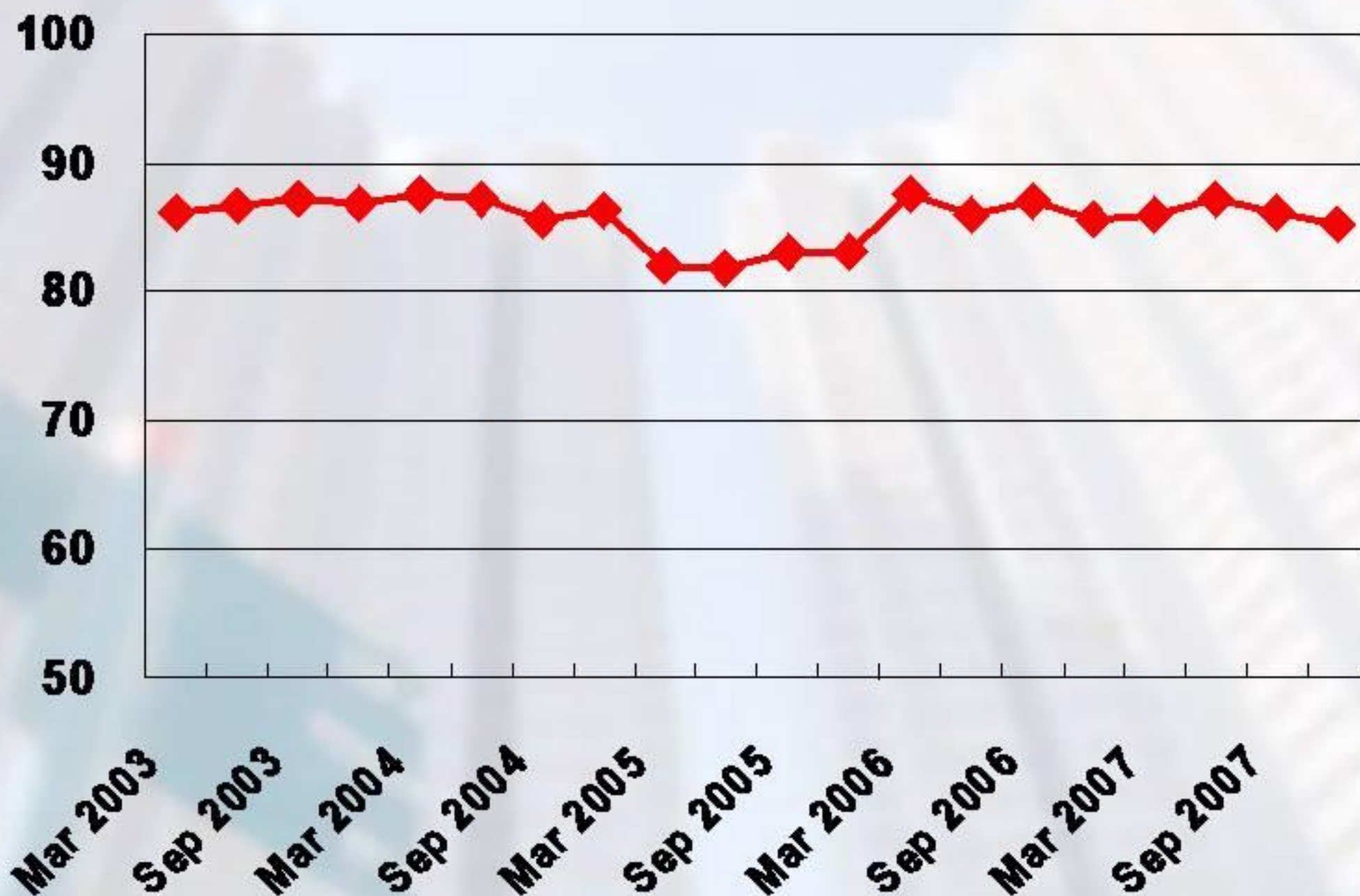




PASS – Safety Assessment

Average Safety Score

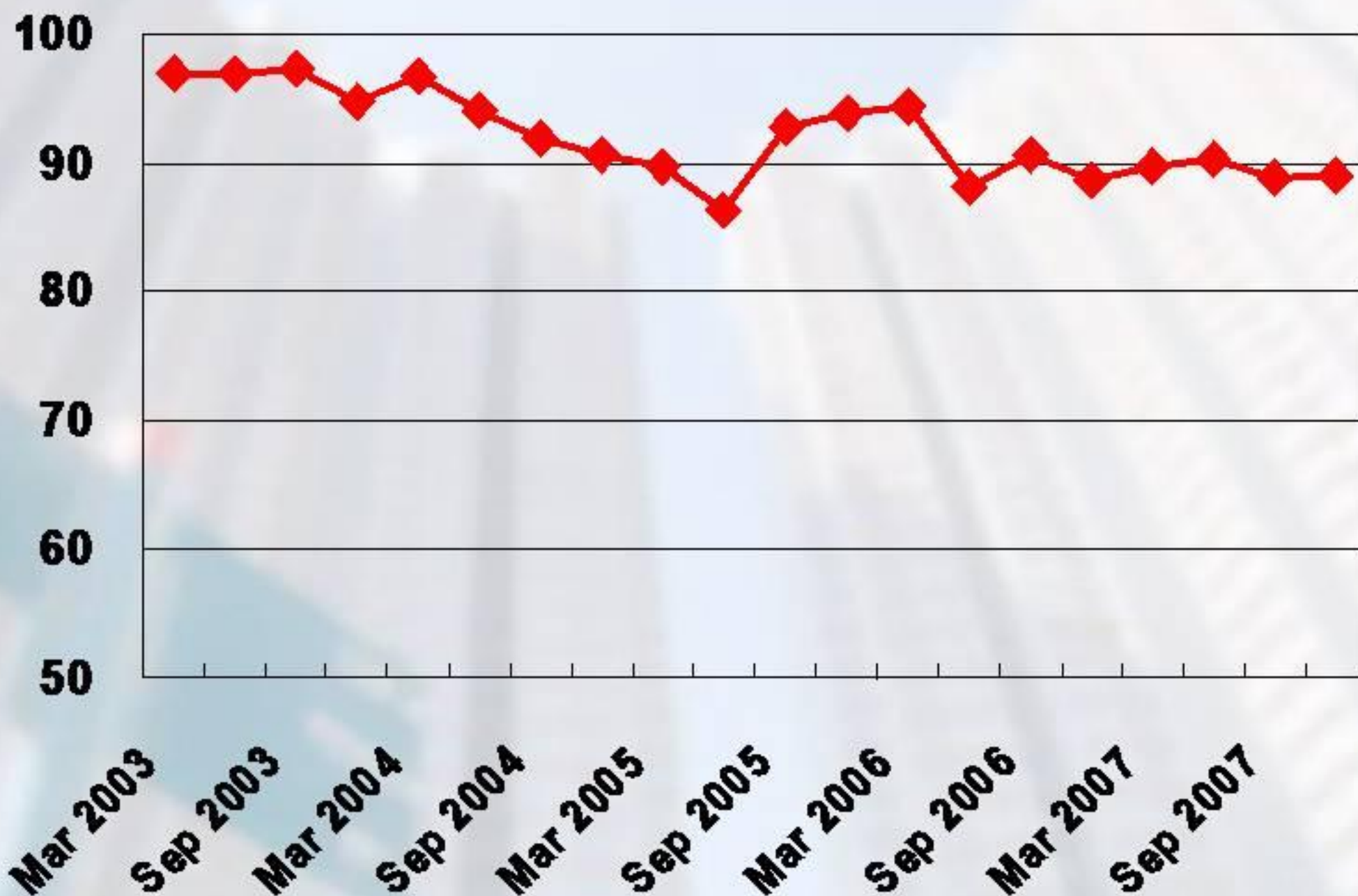
(Factor : SA2 - HASAS score for Implementation of the Safety & Health Plan)





PASS – Safety Assessment

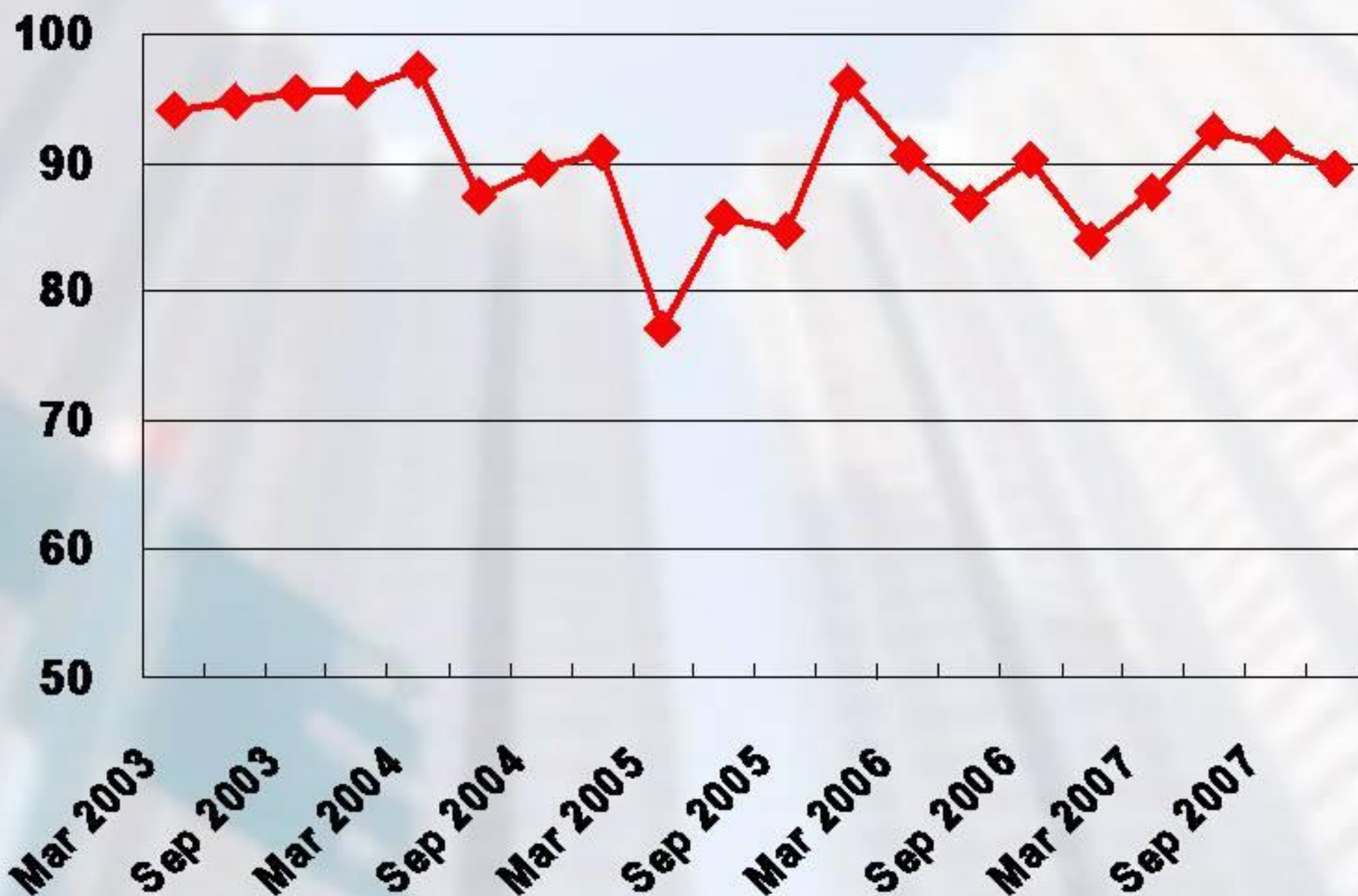
Average Safety Score (Factor : SA3 General Site Safety)





PASS – Safety Assessment

Average Safety Score (Factor : SA4 Block Related Safety)





PASS – Safety Assessment

Assessment Standard for Lifting Appliances/ Cranes

- Provide, maintain and operate lifting appliances.
- Lifting load not to exceed safe limit.
- Operators must hold relevant certificate or be properly trained.
- Provide a signaller for operator of lifting appliance to effect a clear and unrestricted view of works area and view necessary for safe working of appliance.
- **No objects fall from height when being lifted.** * Critical Failure Item
- **No damage to property arising from objects fall from height when being lifted.** * Critical Failure Item
- **No bodily injury arising from objects fall from height when being lifted.** * Critical Failure Item



PASS – Safety Assessment

Assessment Standard for Lifting Appliances/ Cranes (Cont'd)

- **All materials being lifted are to be safely tied.** * Critical Failure Item
- **Transportation of material by crane not permitted outside site boundary.** * Critical Failure Item
- Mobile cranes to have outriggers fully extended and securely supported before commencing operations.
- Provide automatic safe load indicator.
- Provide warning signs in both Chinese characters and English lettering for areas at ground level within lifting zone.
- Provide maintenance record for checking.



PASS General Site Safety Assessment

Items with high failure rate

- Earthwork - Mass Excavation/slope/stockpile
(surface water Run-off)
(Earth-moving Machinery)
- Earthwork – Trenches/Pits
- Scaffolding, Screens and Working Platform
Nylon Mesh/Similar Covering
Fans
Working Platform OR Harness and Independent Lifelines
- **Lifting Appliances / Cranes**
- Green/Silver Card Provision
Silver Card (Bar Fixer, Bamboo Scaffolder, Demolition Worker)
- Silver Card (7 trades – e.g. painter, carpenter etc.)
- Temporary Electrical Installation



PASS Block Related Safety Assessment

Items with high accident rate

- Fences, Rails and Barriers
(Installation of Precast Element)
- (Working Platform)
- Storage and Removal of Materials
(Waste Material found on Canopies)
- Temporary Electrical Installation
- Miscellaneous



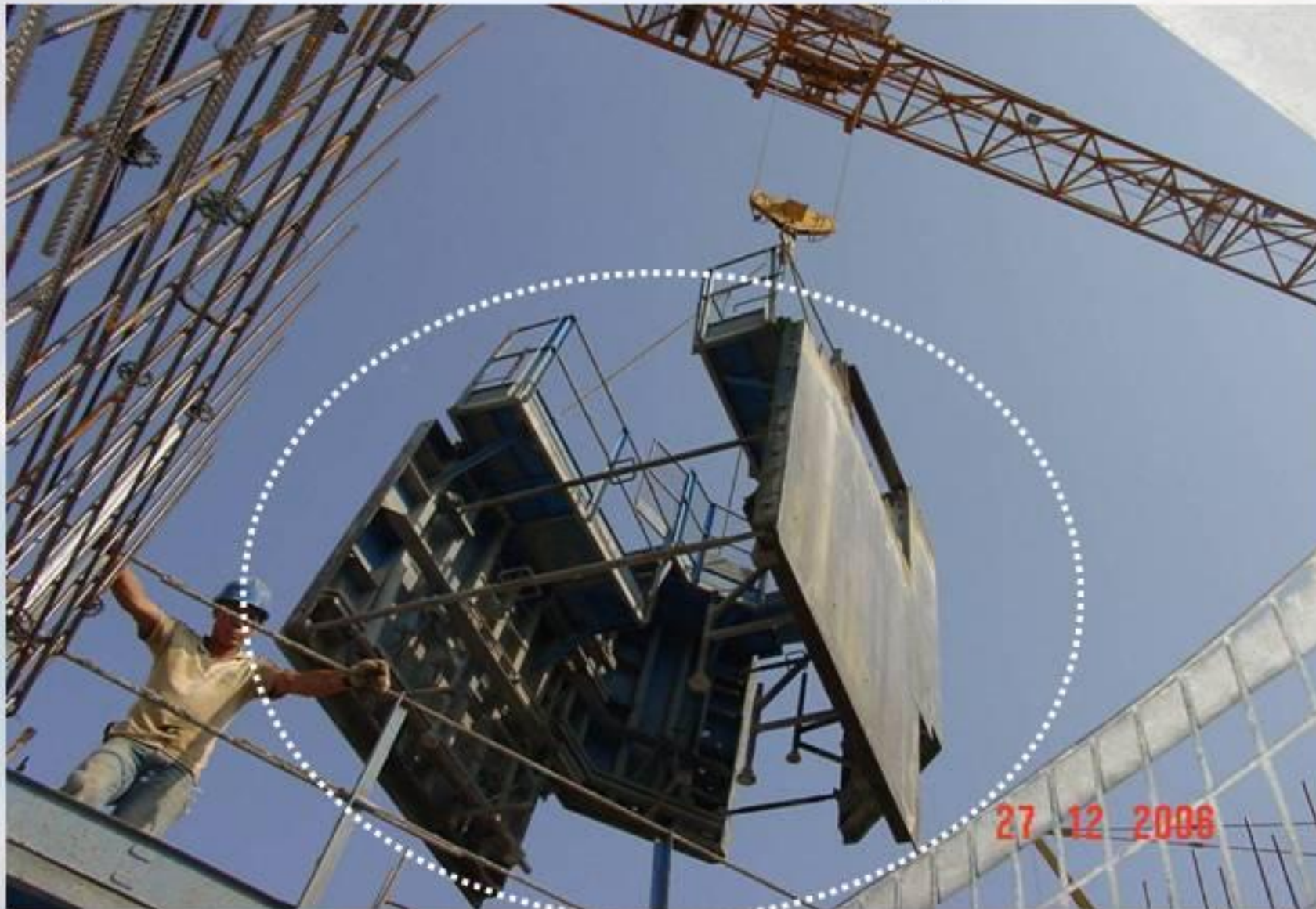
Site Observations

- Lifting Appliances / Cranes
- Earthwork - Excavation
- Fencing
- Access & Egress
- Temporary Works/Working Platform
- Miscellaneous



Lifting Appliances / Cranes

Malpractice in lifting 2 working platforms simultaneously





Lifting Appliances / Cranes

Outriggers of mobile crane not fully extended and no warning signs





Lifting Appliances / Cranes

Outriggers of mobile crane not fully extended and no warning signs





Earthwork - Excavation

No proper fencing / warning at top of slope



(PASS standard :
Provide securely fixed
timber or metal fencing
and warning signs.)



Earthwork - Excavation

Steep slope excavation exceeding 1.2m high without support



(PASS standard : Securely support all mass excavations. Slope >1.2m high. Stability to be substantiated by design calculation / by forming the excavation to a safe batter as agreed by Project Team.)



Substandard (bamboo) top & middle railing with no toe board at working platform



(PASS standard : Provide securely fixed timber / metal fencing with top railing (900mm-1150mm), middle railing (450mm to 600mm) & toeboard.)



No temporary railings provided at opening of tower crane



(PASS standard : Provide
and secure top railings,
middle railings & toeboards)



Unsafe access to Manhole



(PASS standard : Provide a safe means of access to, and egress from trenches/ pits exceeding 1.2m high for manholes. e.g. properly fixed temporary staircase or ladder with hand railing at both sides.



Access & Egress

No railing on sides of temporary staircase & staircase not fixed to main structure





Access & Egress

No temporary railings at the edge of staircase





Access & Egress

Access & Egress – acceptable ladder with handrails on both sides and adequate projection to landing





Temporary Works / Working Platform

Temporary Metal Support – One bolt missing

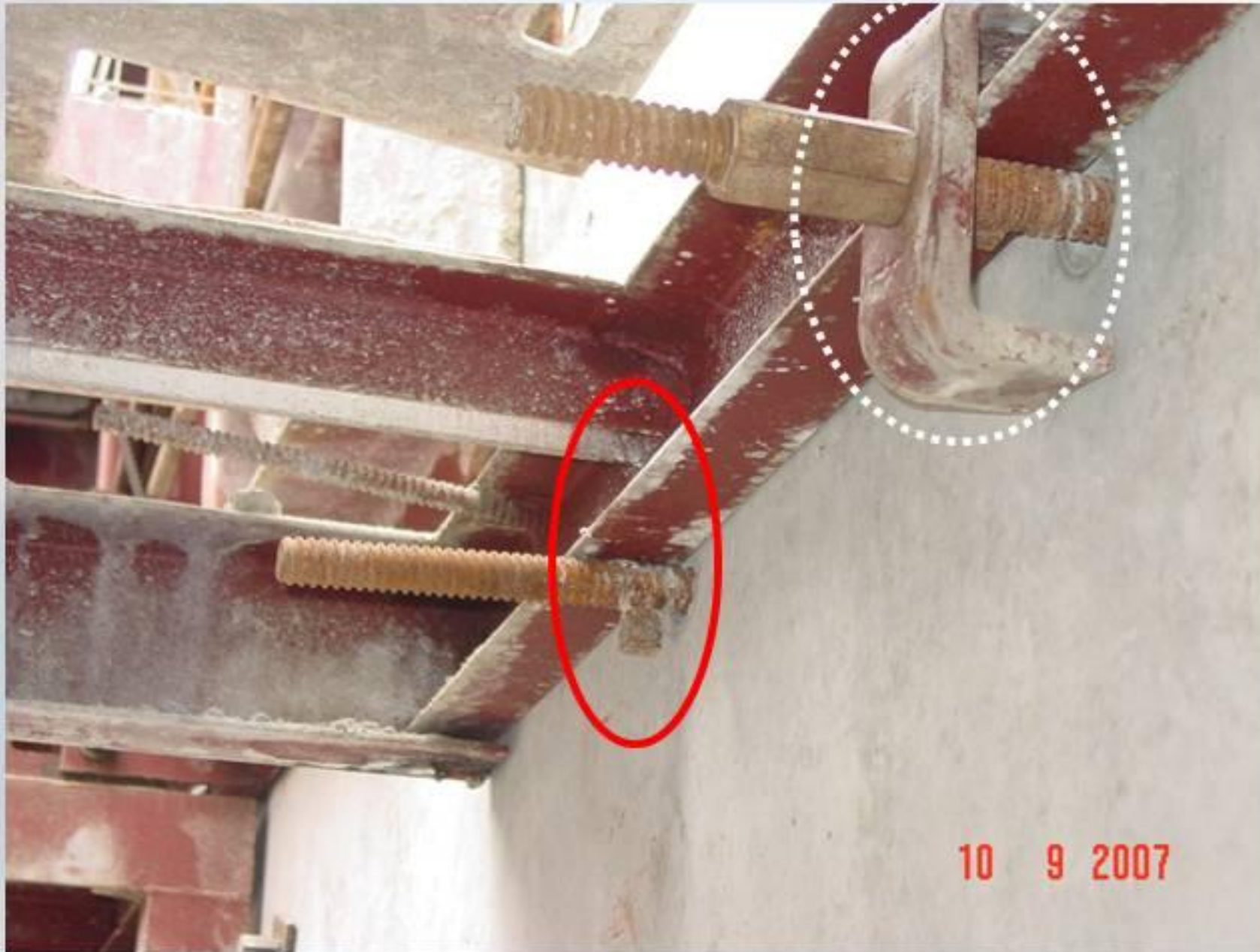


(PASS standard : Provide proper and secure support to temporary works)



Temporary Works / Working Platform

Temporary without U-bolt for fixing





Temporary Works / Working Platform

Unsatisfactory working platform



(PASS standard : To be closely boarded with a minimum of 3 supports and adequately restrained at both ends.)



Fire Prevention – No sand in sand bucket for fire fighting provision





Protection against risk of falling – sealing the gap at low level of lift shaft opening by plastic strip





Miscellaneous

Protection against risk of falling – Lift shaft fully enclosed





Temporary covered walkway for workers





Thank You