

Method Statement & Risk Assessments

For:

Project Name & Address:	Planwell House, LEFA Business Park, Edgington Road, Sidcup, Kent, DA14 5BH
Client:	Belshaw
Task:	Demolition of building
Date Issued:	Tuesday 28/11/23
Document Number:	RAMS/001
Revision Number:	000

Prepared By:	Signature:	Position:	Date:
Matt Hampton		Project Manager	28/11/23

Document Revision Record		
Issue No.	Date:	Details of Revision:
001		
002		
003		
004		
005		

Basic Project Info	
Start Date on Project:	Tuesday 28/11/23
Expected Duration:	8 – 10 Weeks
Exact Location of Works:	Entire Building
Client Site Contact and Number:	TBC
Lawmans (UK) Supervisor & Number:	TBC



Lawmens.

a trading name of Lawmans UK Ltd



Lawmens.

THE LAWMENS HEALTH & SAFETY ETHOS



ZERO TOLERANCE FOR COMPLACENCY

Complacency is never accepted, from our project managers, through to daily operatives.



PPE

Ensure all operatives are wearing the correct PPE at all times.



SHARED RESPONSIBILITY

ALL operatives encouraged to look after each others H&S.



STOPCOCK

Have you located the stopcock?



ISOLATIONS

Only work from cut ends. No cut ends = No cutting.



ASBESTOS

Always review the Asbestos Register before starting work. If you find any unfamiliar materials, STOP WORK and consult the Foreman and Site Manager.



WELCOME NEW OPERATIVES

Find out their strengths and what works they are capable of completing.



DUST CONTROL

Use of dust cubes and water suppression wherever possible.



VIBRATION

Ensuring all vibration works are recorded in HAVS register.



COMMUNICATE

Carry out daily briefings and weekly toolbox talks.



PLANT & TOOLS

Ensuring correct tools and plant are used and they are in good working condition.



Lawmens.

WHERE HEALTH & SAFETY IS PARAMOUNT.

1.0 Scope of Works:

To carefully strip out / break out / dismantle / demolish and remove the following from site:

- Entire brick building / structure down to ground level including slab and foundations.



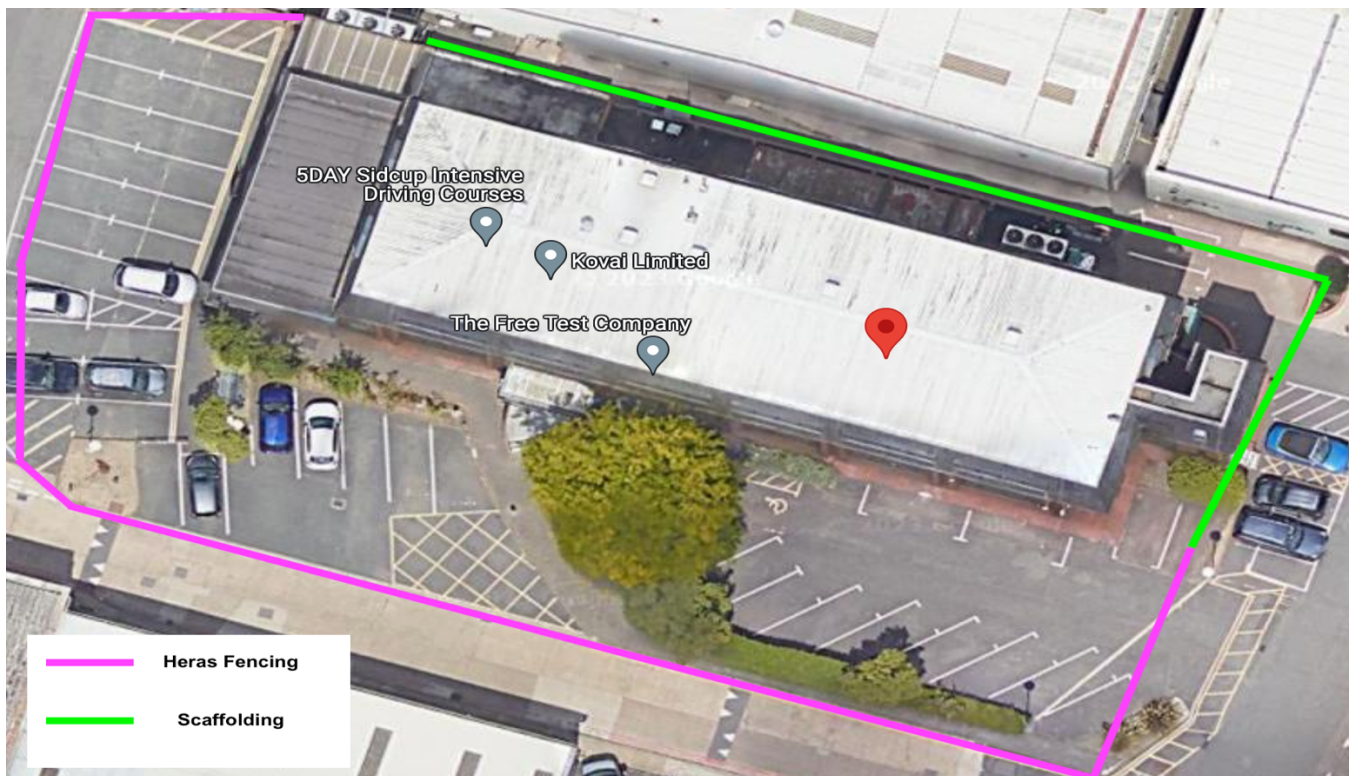
The works involved can be broken down into sections as follows: -

- Site Setup & Establishment
- Service Isolations (Covered in separate RAMS)
- Soft Strip Out (Covered in Separate RAMS)
- Main Demolition works
- Site Clearance and Decant

2.0 Methodology:

1) Site Setup / Establishment:

- Site perimeter will initially be cordoned off using heras fencing.
- Site Welfare cabin will be delivered and placed in car park area for duration of works.
- Service Isolations carried out with all services isolated and purged and taken back to incoming mains (Separate RAMS)
- Full height Scaffolding erected to rear and right flank elevations of building, fitted with monoflex to protect debris from encroaching outside of site area. This scaffolding will be struck and lowered as works progress in line with the demolition of the upper storeys of the building.
- De-misting cannons will be put in place in the vicinity of works to spray a fine water mist over works area to suppress dust.
- Dust monitoring equipment will be put in place to measure dust levels and sound alarm if dust levels exceed acceptable limits.



2) Soft Strip Out:

- Fixtures, fittings and some finishes soft stripped internally prior to demolition of main structure commencing (Separate RAMS issued for strip out)

3) Main Demolition Works:

- All works to be completed systematically and progressively working from the front of the building to the rear.
- Starting at the front of the property, a 35 tonne 360 excavator, fitted with selector grab attachment will remove all roof coverings including slates, sub layers and timber structures, lowering to ground level where another 35 tonne 360 excavator fitted with a selector grab attachment will segregate all debris removed and place into 40 yard skips located in the car park area, ready for removal from site.
- Once all roof coverings are removed, exposing all steel framework, all steel framework will be removed using the 360 excavator fitted with shear attachment and all steelwork lowered to ground level where other excavator will load into skips for removal.
- Once roof structure has been removed completely, all windows and glazing will be removed to Level 1 using the 360 excavator, and lowered to ground level where the other excavator will load into skips for removal.
- 2nd floor slab and brickwork / blockwork walls will then be broken out using 360 excavator machine fitted with breaker attachment. Walls will be pushed inwards and slab will be broken out on to floor slab below and then cleared to ground level where the other excavator will stockpile concrete and hardcore ready to be crushed.
- The process above will then be repeated for Level 1 to remove all structures down to ground level and completely removing from site, leaving the ground floor slab and foundations.
- Ground floor slab and foundations will then be broken out using 360 excavator with breaker / pecker attachment and all concrete and brickwork stockpiled into piles ready to be crushed.

4) Material Crushing:

All suitable brick and concrete debris / hardcore will be loaded from the stockpiled materials into a mobile crushing plant located on site using the 360 excavators fitted with bucket attachments and materials crushed to type 6F2 and stockpiled on site for re-use at a later date.

5) Site Clearance and Decant:

- Upon completion of all demolition works, the heras fencing and site welfare units will be removed from site and site left clean and clear for handover back to the client.

3.0 Waste Removal Route & Logistics:

All debris once broken out will be removed directly into 40 yard skips using a 35 tonne 360 excavator with selector grab or bucket attachments.

All hardcore and concrete debris will be placed directly into 8 wheeled tippers for removal.

All vehicles attending site will be supervised by a banksman to ensure they are safely guided into position for loading. Chapter eight barriers will be used to safely reroute pedestrians and other contractors away from the vehicle whilst loading is taking place.

4.0 Risk Assessments:

The aspects below have been identified as potential risks that may be encountered whilst carrying out these works: -

001: Slips, Trips and falls on the level	010: Asbestos
002: Vibration	011: Use of Power Tools
003: Falls from Height	012: Cuts from Sharp Objects
004: Noise	013: Vehicle Movements and loading / unloading
005: Falling Materials	014: Use of 360 Excavators / Bobcats / Skidsteers
006: Lighting Levels	015: Stone Based Products COSHH Assessment
007: Flying Particles	016: Fibre Glass COSHH Assessment
008: Manual Handling	
009: Dust, Silica Dust & Other etc..	

5.0 Isolation of Services:

All services are to be fully isolated prior to works commencing. Isolation certificates are to be provided for each service and Lawmans (UK) Ltd Isolation sheets completed and signed off for 1) Plumbing, 2) Electrics, 3) Fire Alarm & 4) Gas / AC equipment before works can commence.

All services will be cut off at the incoming mains allowing all remaining services within the building to be stripped out leaving the incoming mains protected in situ.

6.0 Manual Handling:

All strip out and demolition works involve a large amount of manual handling as detailed in the Manual Handling Assessment and all operatives have received Manual Handling training. All demolition will be carried out using excavators where possible and all waste to be transported or removed will be placed directly into skips using the excavators to minimise manual handling wherever possible.

7.0 Hand Arm Vibration (HAVS):

Operatives using vibration tools are to record details of the tool used, usage and trigger times in the HAVS Register and cease use on vibration tools as soon as daily exposure limits have been reached. The HAVS register identifies the vibration tools used for this project and the tri-axial vibration values for each tool as specified by the manufacture. In turn this allows use of the HSE calculation graphic and additional information from the HSE website to calculate daily exposure limits.

8.0 Noise:

Noise will be generated through the use of power tools including reciprocating saws, pro duro floor strippers and kango breakers. Agreed times for noisy works are to be coordinated with the Site management and in line with local authority restrictions to ensure the impact on affected parties is minimised wherever possible. Noise exclusion zones to be used in areas where works generate a large amount of noise and all operatives within the noise exclusion zone to wear ear protection conforming to BS 352.

9.0 Dust:

All works generating dust will be controlled using a combination of water sprayers to dampen down debris, dust cubes and extraction units to ensure dust is kept to a minimum where possible and the works area remains well ventilated. Operatives to wear face fit tested half face dust masks conforming to EN140:1998 when carrying out works in dusty environments. Where possible, practical and safe, tool specific dust extraction kits will be used on all tools generating dust and cutting stations established where large amounts of cutting is required with tool extraction fitted to the cutting tools being used.

10.0 Access & Egress:

General Access to site will be via the welfare unit situated in the car park area where operatives will then sign in prior to commencing works and sign out prior to leaving site each day. Fire escapes, escape routes and muster points will be advised by Lawmens site management in the site induction.

11.0 Working at Height:

All works above eye level that cannot be safely completed from ground level are deemed as working at height. All works carried out at height are to be completed using Podiums, Klikfold Platforms and Scaffold towers all erected by operatives supervised by a PASMA trained operative. Any working at height equipment will be signed off using a 'ScaffTag' system, checked daily and signed off by the PASMA trained operative on a weekly basis. Only tools being used are to be placed on the platform and all other tools removed to floor level. All working at height works to be assessed by the Lawmans UK Ltd supervisor and site team to assess the most suitable equipment to carry out the task safely. Exclusion zones to be enforced in areas where working at height are taking place to ensure only relevant personnel are within the working zone.

12.0 Site Supervision & Personnel Levels:

Lawmans UK Ltd SMSTS Trained Supervisor: TBC
Lawmans UK total Operatives on site: 6

13.0 Plant, Equipment and Tools:

The following items form the standard tools used by Lawmans (UK) Ltd on all projects: -

Hand Tools: Club Hammers, Claw Hammers, Crowbars, Spanners, Socket Sets, Bolsters, Chisels, Tin Snips, Stanley Knives, Allan Keys, Screwdrivers, Hack Saws, Pliers, Wire Cutters, Pipe Cutters, Pad Saws, Sledge Hammers and Manual Floor Scrapers.

Power Tools (Model specified or similar equivalent from alternative Manufacturer):

Impact Drivers / Drills: Hilti 14.4v SID – 14A or Makita 14.4v BTP 131Z

Reciprocating Saws: AVT Makita JR 3070CT / Hilti SR 30

Kango Breakers: Hilti TE 700-AVR, TE 1000-AVR or Milwaukee 950 K/S

(All Power Tools run on 110v Power with Transformers Supplied, and all equipment holds a current PAT Test certificate)

Working at Height Equipment:

Klikfolds: - Eurotower Klikfold Podium Tower

Dust Extraction:

Hilti VC - 40M – X110v Hoover with Tool specific dust Extraction kits

DC Dustcube 500 & DC Dustcube 1000

35t 360 Excavator:

Hyundai or Similar (See Data Sheet)

Excavator Fittings:

Breaker / Pecker, Selector grab and shears / nibbler.



14.0 Materials:

None.

15.0 Housekeeping & Storage, Welfare and General Information :

Housekeeping: Floor areas to be kept clear at all times by storing rubbish in Wheelie Bins wherever possible. Any stacked up debris to be cordoned off in a segregated area using hazard tape. Areas of works, floors and access routes to be swept and cleared at the end of each shift. All access routes and fire routes to be kept clear at all times with no exception.

Site Welfare: Lawmans UK Ltd to ensure that the site has adequate hot water, WC facilities and supplies, changing and washing facilities, drinking water and a breakout area with tables and chairs, fridge, kettle and microwave. **IF THIS ITEM IS NOT IN PLACE, DO NOT COMMENCE WORKS!**

Fire Alarm: If a working Fire alarm is not present within the building then the Lawmans UK Ltd must ensure Fire Call Points / trolleys are stationed at agreed points on each floor prior to works commencing. **IF THIS ITEM IS NOT IN PLACE, DO NOT COMMENCE WORKS!**

Third Party Protection: Only relevant site personnel to be present throughout duration of works. Any third party visitors to be escorted around site prior to receiving a full induction by Lawmans UK Ltd. Barriers to be used on site to cordon off areas of high risk i.e. holes in floor void, works at high level and barriers to be used in conjunction with Banksmen to ensure that where debris removal encroaches on General Public, they are clearly and safely diverted away from the activity.

Signage: All site signage and relevant Health & Safety Signage to be provided by Lawmans UK Ltd. Lawmans (UK) to provide additional signage for specific tasks not included in General H&S signage.

Emergency / Accident Procedure: In the event of an emergency all operatives are to evacuate the building as quickly as possible using the route specified in the Lawmans UK Ltd site induction. All accidents are to be recorded in the on site accident book and also reported in the Lawmans (UK) office accident book. Accident / Incident report to be filled

in on site by supervisor and affected party and a copy issued to Lawmans (UK) Project Manager and Lawmans UK Ltd site management.

16.0 Permits:

Permits to work are required for hot works (If using angle grinders or burning equipment) and on occasion, to work within risers. These permits must be signed off by Lawmans UK Ltd before any of the above operations are carried out.

17.0 Training:

As a minimum all Lawmans UK Ltd operatives have completed the following training:

- Current CSCS Card
- Manual Handling
- Asbestos Awareness
- Working at Height

All Lawmans UK Ltd appointed supervisors have completed the following training as a minimum in addition to the above:

- SMSTS
- 3 Day First Aid Training
- PASMA
- IPAF

**Certification for any of the above can be supplied on request if not already issued.

18.0 Mandatory PPE

Lawmans (UK) Ltd operate a 5 Point PPE policy on all of their projects with the following PPE to be worn at ALL times by ALL Lawmans UK Ltd operatives:

- Steel Toe Capped Boots (Conforming to EN345 200 JOULES)
- Hard Hats (Conforming to EN397)
- Hi – Viz Vests (Conforming to EN471 CLASS 2)

- Task Specific Gloves (Conforming to EN420:2003)
- Protective Goggles / Eyewear (Conforming to EN166) – To be worn by operatives on neck strings at ALL Times when not in use.

19.0 Task Specific PPE:

For specific tasks Lawmans (UK) Ltd operatives are also equipped with and required to wear:

- Ear Defenders (Conforming to EN352)
- Kevlar Protective Sleeves (Conforming to BS EN 388:2003 & EN 407:2004)

20.0 Respiratory Protection Equipment (RPE):

Moldex Series 7000 Dust Masks (Conforming to EN140:1998) – Face Fit Tested for each individual employee.

21.0 First Aid Arrangements:

Lawmans UK Ltd supervisor is an approved First Aider and a first aid box can be found in the Lawmans UK toolbox and also the Lawmans UK Ltd site office.

22.0 Temporary Power & Lighting:

All power to be transformed to regulation 110v. All Temporary lighting to main areas of work to be provided by Lawmans UK Ltd. Lawmans (UK) Ltd to also provide any task specific lighting required.

23.0 Communication:

All communication on site is to be carried out on a verbal basis and the use of Digital Radio style walkie talkies is not permitted.
All RAMS, toolbox talks and site briefings will be carried out on a verbal basis with all operatives signing the relevant briefing registers to confirm their understanding of the briefings given.

24.0 Monitoring & Review of Safe Working Systems:













The monitoring and enforcement of all safe working systems and practices on site is the responsibility of the Lawmans UK supervisor and project manager:






Site Supervisor - TBC











Project Manager – TBC

25.0 Manual Handling Operations Checklist:

Company: Lawmans UK Ltd	Project: Planwell House, Sidcup
Materials being Handled: Waste	Activity: Demolition Works
Can Manual Handling be Eliminated? No	Are there Hazardous Contents?: No

PROCESS:											
											
Stooping	Lifting High	Lifting Low	Handling whilst seated	Repetition	Reaching High	Reaching Low	Carrying	Twisting	Bending Sideways	Pushing	Pulling
No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

PERSON:				
				
Need for Unusual Strength	Training Required	PPE to be Worn	18 - 55 Years	Medical Condition or History?
No	Yes	Yes	Yes	No

ENVIRONMENT:											
											
Hot	Cold	Humid	Windy	Dusty	Noisy	Vibrating	Obstructions	Steps	Confined Spaces	Slopes	Uneven Surfaces
Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes

25.1 Control Measures for Manual Handling:

- So far as is reasonably practicable, all manual handling activities will be avoided and mechanical means used such as wheelie bins, flat bed trollies, skates and A Frame sheet material trollies.
- Goods hoists and lifts to be used wherever possible to avoid increased levels of manual handling via the stairs.
- Where intensive or hazardous manual handling activities cannot be avoided, the risk of injury will be reduced as far as reasonably possible by: -
- Using correct manual handling techniques as given in training
- Separating large loads into smaller more practical and manageable loads where possible.
- Operatives to only lift what they can safely manage and obtain assistance from another operative for heavy loads.
- All waste removal routes to be kept clear of any trip hazards and blockages at all times.

26.0 Risk Assessments

Risk Assessment Summary

Site Location:	Entire Building	Assessment Carried out by:	Matt Hampton
Activity / Operation:	Demolition Works	Position:	Project Manager
Date of Assessment:	30/01/24	Signature:	

Probability Classification (P)	Severity Classification (S)	Degree of Risk (PxS)	Persons Affected
0 = Impossible	0 = No injury / affect	0 = No risk	E = Employee
1 = Improbable – Very low probability of such an event occurring.	1 = Minor – Minor accident, resulting in no injuries or lost time, little or no damage to property or the environment.	1 to 5 = Low Risk – ensures controls are adhered to and activity need not alter	CN = Other Contractors
2 = Remote – Would rarely occur.	2 = Moderate – Potential injury necessitating less than 3 days off work, damage to property or the environment requiring remedial work.	6 to 10 = Moderate Risk – tolerable, but efforts should be made to reduce the risk where cost effective and reasonably practicable.	VS = Visitors to Site
3 = Possible – May occur on occasions.	3 = Serious – Accident reportable under RIDDOR 95, serious damage to property or the environment.	11 to 15 = Substantial Risk – all practicable measures must be taken to reduce the level of risk, tolerable only where risk reduction is impracticable or disproportionate to the risk involved.	PB = Member of the Public
4 = Probable – Could occur frequently.	4 = Major – Accident resulting in serious or permanent injury, major or permanent damage to property or the environment.	16 -25 = Extreme Risk – Unacceptable except in extraordinary circumstances, all control measures must be taken regardless of cost.	YP = Young Person
5 = Likely – Very likely to happen unless activity prevented.	5 = Catastrophic – Accident resulting in death or severe disablement, destruction of property, irreversible damage to the environment.		

Risk Matrix - To be used to determine the degree of risk for each hazard i.e. 'how bad and how likely'

Severity of Harm						
Probability of Harm	0 = No Injury/Affect	1 = Minor	2 = Moderate	3 = Serious	4 = Major	5 = Catastrophic
0 = Impossible	No Risk	No Risk	No Risk	No Risk		
1 = Improbable	No Risk	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk
2 = Remote	No Risk	Low Risk	Low Risk	Moderate Risk	Moderate Risk	Moderate Risk
3 = Possible	No Risk	Low Risk	Moderate Risk	Moderate Risk	Substantial Risk	Substantial Risk
4 = Probable	No Risk	Moderate Risk	Moderate Risk	Substantial Risk	Substantial Risk	Extreme Risk
5 = Likely	No Risk	Moderate Risk	Moderate Risk	Substantial Risk	Extreme Risk	Extreme Risk



Assessment Number & Hazard Identified	Risk Ranking			Persons Affected	Control Measures put in place to control & reduce risk	Residual Risk Ranking		
	Probability (P)	Severity (S)	Significance (PxS)			Probability (P)	Severity (S)	Significance (PxS)
001: Slips, Trips & Falls on the Level	4	3	12	E, CN, VS	<ul style="list-style-type: none"> All operatives are to clear work areas as work proceeds and as waste is produced. All waste must be placed into wheelie bins or rubble bags as soon as it is generated, and stored in the designated area on site ready for removal. Any areas with debris stacked for removal must be clearly cordoned off using hazard tape. Access and egress will remain clear at all times. Debris and trip hazards observed around the works are to be picked up / removed or highlighted as a hazard to others and protection put in place where practical. Spills which may result in slips are to be cleared as soon as is practical. Ensure all areas of works, corridors and stairwells are adequately lit. 	1	3	3
002: Vibration	3	4	12	E	<ul style="list-style-type: none"> AVT (Anti Vibration Tools) to be used wherever possible to minimise vibration exposure to operatives. Operatives to adhere strictly to exposure limits and times on specified tools as detailed in the HAVS register. All operatives to record times used on each tool in the HAVS register to be reviewed by Site Supervisor to ensure exposure limits are not exceeded. Encourage rotation of staff using vibration tools where possible to limit their exposure to vibration. 	1	3	3



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	Probability (P)	Severity (S)	Significance (PxS)			Probability (P)	Severity (S)	Significance (PxS)
003: Falls from Height	4	3	12	E, CN, VS	<ul style="list-style-type: none"> All low level platforms are to conform to BS 8620: 2016 Standards and regulations. Scaffold towers when used on site will be erected by competent PASMA trained operatives and checked by the supervisor for their integrity. Tower scaffolding and low level platforms when used will be inspected daily before use and weekly if in the same position and a record entered into the weekly register. All erected platforms and towers to be fitted with Scafftags and signed off every 7 days until deconstructed. Any platforms or scaffolds or component parts that are damaged are to be removed from site immediately and not used under any circumstances. All towers must be equipped with kickboards and outriggers. All operatives are to ensure at all times that they do not lean outside the tower / platform, or move it whilst operatives or waste are loaded on to it. 	1	3	3
004: Noise	3	3	9	E, CN, VS, PB	<ul style="list-style-type: none"> Ear Defenders conforming to BS 352 to be worn at all times when carrying out noisy works. Noisy works to be scheduled at scheduled and agreed times throughout the working period to minimise the impact and disruption on third parties. Noise exclusion zones to be used in areas where excessive noise is necessary and only personnel relevant to the works to be allowed within the zones. Noise monitoring equipment to be used where necessary to ensure noise exposure levels do not exceed the Noise at Work Regulations 2005. Where noise monitoring is utilised, all readings and measurements to be recorded in the Noise Register. 	1	3	3



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005: Falling Materials	4	4	16	E, CN, VS, PB	<ul style="list-style-type: none"> • All operatives to wear Hard Hats conforming to EN 397: 2012 in areas where working at height is taking place. • Exclusion zones to be used in areas where working at height are taking place and only necessary personnel to be allowed within zone. • All debris removed at height to be carefully lowered and passed to ground level not bombed or dropped from platforms or scaffolds. • All platforms and towers to be fitted with toe boards to ensure debris cannot be kicked / fall from platform. • Mechanical Lifting equipment such as genie lifts to be used to safely lower heavy items. Genie lifts to be fitted with pipe holders for circular items being removed, to remove the risk of them rolling off the genie forks. 	1	4	4
006: Lighting Levels	2	3	6	E, CN, VS	<ul style="list-style-type: none"> • All areas where demolition works are being carried out are to be adequately lit at all times. • If at any time the area of works becomes dim or is not adequately lit, all operatives are to stop works until adequate lighting has been sourced and installed. 	1	3	3



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007: Flying Particles	3	3	9	E, CN, VS	<ul style="list-style-type: none"> All operatives to wear eye protection / Safety Glasses conforming to EN166 Standards whenever carrying out strip out works. All operatives to wear eye protection / Safety Glasses conforming to EN166 Standards whenever using power tools including kango breakers, reciprocating saws and Pro Duro Floor Strippers. First Aid Kits to contain Eye Wash Solution to allow operatives to clean their eye effectively in the event a particle gets in their eye(s). 	1	3	3
008: Manual Handling	4	3	12	E	<ul style="list-style-type: none"> So far as is reasonably practicable, all manual-handling activities will be avoided and mechanical means used e.g. removal of debris via the lift / hoist. Where hazardous manual handling activities cannot be avoided, the risk of injury will be reduced as far as is reasonably practicable by:- Using correct manual handling techniques. Reducing loads and separating into smaller loads when lifting to avoid injury. Never attempt to lift something that is too heavy for your own capabilities, obtain assistance from another colleague. Ensure that routes are cleared of all trip hazards before the commencement of work. 	2	3	6



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009: Dust Including Silica Dust, Plasterboard Dust and Saw Dust	3	3	9	E, CN, VS, PB	<ul style="list-style-type: none"> All operatives to wear face fitted Half Face Dust Masks conforming to EN140 Standards with FFP3 Filtration as a minimum. All operatives to have face fit test for half face mask to show correct fitting and knowledge of 'good seal' on mask. All operatives to ensure filters are cleaned and replaced on regular basis to ensure effective filtration of dust. Works creating excessive dust to be watered and dampened down where possible to minimise the creation and migration of dust. Extractor Fans and Dust cubes to be used where necessary to ensure dusty areas remain well ventilated and reduce dust in the air wherever possible. All operatives to ensure they wash their hands with clean water and soap following works in dusty areas and prior to eating and drinking. Tool specific dust extraction kits to be applied to all tools generating dust where practical and safe. Cutting stations to be used on projects with large amounts of debris to be cut in smaller sections with dust extraction fitted on all tools used for cutting in these areas. 	2	2	4



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010: Asbestos	3	4	12	E, CN, VS	<ul style="list-style-type: none"> All operatives to have asbestos awareness training. All operatives to have access to, and be briefed on the Asbestos survey for the building. If at any time operatives discover an unfamiliar material whilst carrying out strip out works, all operatives are to stop works immediately and consult the Lawmans (UK) supervisor and site manager. All areas on site where asbestos works are being undertaken by the asbestos contractor are to be clearly cordoned off to the remainder of personnel on site to ensure nobody can encroach on the area. 	1	4	4
011: Use of Power Tools	3	3	9	E, CN, VS	<ul style="list-style-type: none"> Only experienced operators to operate power tools. Tools to be used in line with Manufacturers guidelines and operating instructions. Low vibration tools to be used where possible and limit the use of tools to restrict vibration dose. Tools to be in good condition and regularly maintained and PAT tested. Any faulty equipment to be removed from site and replaced immediately. 	1	3	3
012: Cuts from Sharp Objects	4	3	12	E, CN, VS	<ul style="list-style-type: none"> All operatives to wear task specific cut resistant gloves. Operatives to wear Kevlar sleeves when working with ceiling grid, ductwork, glass and all sharp objects. Operatives to wear trousers at all times whilst working on site. Any sharp protruding objects to be removed from working area safely and all rubbish stacked in bins with no debris sticking out or protruding. 	1	3	3



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013: Vehicle Movements and loading / unloading	4	3	12	E, CN, VS	<ul style="list-style-type: none"> • All vehicles using loading bays and car parks to be safely escorted into loading position by site traffic marshall or banksman. • Vehicles attending site to call site contact 10 minutes before arrival to ensure loading activities are fully prepared when vehicle arrives. • Dust cart compactors to be used where feasible to remove waste to eliminate requirement for manual loading of bins. • Bins, trollies and bags to be utilised where possible to minimise manual handling. • Bins, trollies and bags to be loaded correctly and not overfilled to ensure safe manual handling and no lifting of overweight objects. • Where boxed tippers are used to remove rubbish; materials, bags and bins are to be loaded by 2 no. operatives either side of the object passing up to the base of the vehicle to the driver situated on the back of the truck who will then empty the bin, position the materials on the back of the truck and pass down the empty bin to the 2 No. operatives. • Chapter eight barriers and / or heras fencing to be used to cordon off loading areas or debris removal route if there is the possibility of encroachment by third parties or members of the public. • All operatives involved in loading / unloading of materials to wear full PPE including Hi-Viz vest, Steel Toe Capped boots and hard hat. 	1	3	3



Assessment Number & Hazard Identified	Risk Ranking			Persons Affected	Control Measures put in place to control & reduce risk	Residual Risk Ranking		
	Probability (P)	Severity (S)	Significance (PxS)			Probability (P)	Severity (S)	Significance (PxS)
014: Use of 360 Excavators and other excavating machines	4	4	16	E, CN, VS	<ul style="list-style-type: none"> Excavator operators to be trained and competent to CPCS standards. Excavator to be safety checked daily by competent person and plant check list sheet completed. Excavator to be issued with certificate of thorough examination. Excavator to be fitted with amber flashing beacon and reversing alarm. Under no circumstances are loads to be left elevated. Excavator to have clear exclusion zones to allow safe slewing and manouvering of excavator. 	1	4	4

015: COSHH ASSESSMENT		
STONE BASED PRODUCTS		
Assessor: Matt Hampton	Supervisor: TBC	
Assessment Date: October 24 th 2023	Date reviewed: 24/10/2023	
HAZARDS IDENTIFIED:		
Substance:	Hazardous Properties:	Quantity:
Stone Based Products	Respirable Crystalline Silica (RCS)	
Emergency Procedures		
<ul style="list-style-type: none"> * Eye contact: Wash eyes with water or eyewash solution immediately. * Inhalation: Take operative to a point of fresh air. * Skin contact: Thoroughly wash all skin with mild soap to avoid risk of dermatitis. 		
What will the chemical be used for? N/A.		
Who may be exposed? All personnel on site if not adequately controlled		
METHODS OF PREVENTION OR CONTROL OF EXPOSURE		
1. Engineering controls required:		2. Access control:
<ul style="list-style-type: none"> * Watering down using watersprayers and hose where suitable. * Dust cubes and Extraction fans. 		<ul style="list-style-type: none"> * Reduce number of people exposed by restricting Area of works to competent personnel.
3. Special procedures:		4. Approved PPE: (<i>Note: PPE is to be used as the 'last resort' when controlling exposure</i>)
<ul style="list-style-type: none"> * Adhere to all controls set out in Risk Assessment. 		<ul style="list-style-type: none"> * Gloves Conforming to EN420:2003 * Eye Goggles Conforming to BS EN 166:2001 * RPE – Moldex Series 7000 Half Masks, face fit tested.
Disposal Procedures (<i>Give details of waste disposal procedure to be used</i>)		
<ul style="list-style-type: none"> * All rubble and debris to be watered down prior to being loaded into bins / bags / wheelbarrows for removal. 		
TRAINING REQUIREMENTS		
<ul style="list-style-type: none"> RPE Face Fit Testing. Toolbox Talks on Silica Dust. 		

ASSESSMENT OF RISK USING CONTROLS DETAILED ABOVE:

If the above control measures are adhered to and appropriate PPE and RPE used, then the risk of harm from dust and silica should be significantly reduced and controlled.

Authorisation by Employer/Supervisor

I confirm that I have considered and understand the chemical to be used and the associated hazards. I am satisfied that all of the hazards have been identified and that the control measures to be followed will reduce the risks to as low a level as reasonably practicable.

Signed: _____

Print: Matt Hampton

016: COSHH ASSESSMENT		
FIBRE GLASS		
Assessor: Matt Hampton		Supervisor: TBC
Assessment Date: October 24 th 2023		Date reviewed: 24/10/2023
HAZARDS IDENTIFIED:		
Substance:	Hazardous Properties:	Quantity:
Fibreglass	Glass Fibres	
Emergency Procedures * Eye contact: Wash eyes with water or eyewash solution immediately. * Inhalation: Take operative to a point of fresh air. * Skin contact: Thoroughly wash all skin with mild soap to avoid skin irritation.		
What will the chemical be used for? N/A Who may be exposed? All operatives removing insulation.		
METHODS OF PREVENTION OR CONTROL OF EXPOSURE		
1. Engineering controls required: * Dust cubes and Extraction fans * Damp down insulation where possible to reduce risk of airborne fibres.		2. Access control: * Area of works restricted to competent personnel.
3. Special procedures: * Adhere to all controls set out in Risk Assessment.		4. Approved PPE: (<i>Note: PPE is to be used as the 'last resort' when controlling exposure</i>) * Gloves Conforming to EN420:2003 * Eye Goggles Conforming to BS EN 166:2001 * RPE – Moldex Series 7000 Half Masks, face fit tested. * Cover bare skin where possible (paper suits)
Disposal Procedures (<i>Give details of waste disposal procedure to be used</i>) * All debris to be loaded into wheelie bins and bags for removal. * Where possible, wrap quantities of insulation in polythene sheet and seal with tape to remove risk of contact with skin.		
TRAINING REQUIREMENTS		
* RPE Face Fit Testing. * Toolbox Talk		

ASSESSMENT OF RISK USING CONTROLS DETAILED ABOVE:

If the above control measures are adhered to and appropriate PPE and RPE used, then the risk of harm from fibreglass should be significantly reduced and controlled.

Authorisation by Employer/Supervisor

I confirm that I have considered and understand the chemical to be used and the associated hazards. I am satisfied that all of the hazards have been identified and that the control measures to be followed will reduce the risks to as low a level as reasonably practicable.

Signed:

Print: Matt Hampton

Please ensure **ALL** operatives working on this project sign below to confirm they have been verbally briefed on all the information contained in the above Method Statement and Risk Assessment and understand the works to be carried out and safe methods of working proposed to ensure all risks are minimised where possible: -

27.0 Method Statement & Risk Assessment Briefing Register		
Print Name	Sign Name	Date



27.0 Method Statement & Risk Assessment Briefing Register

Print Name	Sign Name	Date

28.0 Appendices :

- 28.1 - Job Sign off & Performance Evaluation Sheet
- 28.2 – Isolation Sheets
- 28.3 - HAVS Register
- 28.4 – Toolbox Talks
- 28.5 – Scaffold Register
- 28.6 – Scrap Metal Register
- 28.7 – PAT Test / Power Equipment Register
- 28.8 – Incident / Accident Report Form (Brief)
- 28.9 – RAMS Amendment Sheet
- 28.10 – Excavator Machine Data Sheet

28.1 Job Completion Sign off & Performance Evaluation:

Site Address:

Client:

Supervisor:

Lawmans UK Ltd strive to continue improving their performance and service wherever possible, and the following sheet should be filled out by the site manager for this project and uploaded to the Lawmans UK online portal along with all other documentation for review and evaluation.

Please ask the site manager to sign below to confirm that the works on this project have been completed and that there are no further activities or snagging to be carried out: -

Print:

Sign:

Date:

At Lawmans UK Ltd we are constantly looking for ways to improve and refine the service we provide, and thus we would ask that the site manager who has signed above would quickly mark the below chart to show how he feels we have performed on this project and where if anywhere we could improve the service we provide: -

Area of work	Score out of 10	Comments
Supervisor Performance		
Health & Safety		
Performance of Labour		
Site Attitude		
Project completed within Programme		
Snag Free		
Environmental Attitude		

Any other comments / Areas for Improvement:

28.2 Isolation Sheets

Plumbing

Company completing isolation works:

Area	Yes	No	Print name	Signature	Date	
Toilets						
Kitchen						
Radiators						
Sprinklers						
Have Isolation Certificates been provided to confirm all plumbing has been correctly isolated?					YES	NO
Have you been made aware of the location of the mains water stopcock?					YES	NO
Please state Location:						
Print Name:				Sign:		
Additional Comments:						

Electrics					
Company completing works:					
Area	Yes	No	Print name	Signature	Date
Perimeter					
Kitchen					
Under Floor / Floorboxes					
Ceilings					
Partitions / Walls					
Lighting					
M & E					
Fire Alarm					
Data Cabling & Other Alarms					
Additional Comments:					

AC Units					
Company completing works:					
Job Done	Yes	No	Print name	Signature	Date
De-gassed					
Pipe Isolation					
Power Isolation					
Sprinklers					
Additional Comments:					

Fire Alarm					
Company completing works:					
Job Done	Yes	No	Print name	Signature	Date
Isolated					
Covered					
Disconnected					
Additional Comments:					

Gas					
Company completing works:					
Job Done	Yes	No	Print name	Signature	Date
Isolated					
Purged					
Disconnected					
Additional Comments:					

28.3 HAVS Register:

Regular and constant exposure to vibration can damage the muscles in your hands and arms!!!

Depending on how much vibration the tool you are using gives off, there are time limits for the amount of time you can operate these tools each day!!

On the next page is a list of tools Lawmans UK Ltd use regularly on their strip out projects. Each tool has a vibration magnitude assigned to it to assess the vibration the tool gives off when used.

To ensure we avoid any Lawmans UK Ltd operatives suffering any injury or damage as a result of vibration, please ensure the daily exposure limits are strictly adhered to and the amount of time you use any of the tools listed is recorded in the table below. To ascertain the amount of time you can safely operate the tools below for, please use the hse ready reckoner shown below.

It is a simple exercise as follows: -

Take the vibration magnitude listed next to the tool you are using (shown in the left column in the ready reckoner table) and then take the amount of time you have used the tool for (in the bottom row of the ready reckoner) and this will provide you with an exposure point figure. Then simply use the traffic light principle to assess your vibration limit with green (up to 100 vibration points) safe, yellow/amber (between 100 and 400 vibration points) requires accurate monitoring and reduction where possible, and red (above 400 vibration points) stop immediately and no further vibration works for the day. Remember if you use a tool or different tools within the same day you must add your vibration points together!!

Tool	Tri Axial Vibration Magnitude
Kango Breakers:	
Hilti TE3000-AVR Heavy Duty Breaker	7.0 m/s ²
Hilti TE1000-AVR Heavy Duty Breaker	5.0 m/s ²
Hilti TE700-AVR Medium Hand Held Breaker	6.5 m/s ²
Reciprocating Saws:	
Makita JR3070CT AVT Reciprocating Saw	9.5 m/s ²
Floor Stripper:	
SDS HK1820I Pro Duro Floor Scraper	10 m/s ²

Vibration magnitude, a_{hw} (m/s^2)	Exposure time, T											Legend	
	5 min	15 min	30 min	1 h	1 h 30 min	2 h	3 h	4 h	5 h	6 h			
40	265	800											Above exposure limit value
30	150	450	900										Likely to be at or above limit value
25	105	315	625	1250									Above exposure action value
20	67	200	400	600	1200								Likely to be at or above action value
19	60	180	360	720	1100	1450							Below exposure action value
18	54	160	325	650	970	1300							
17	48	145	290	560	865	1150							
16	43	130	255	510	770	1000							
15	38	115	225	450	675	900	1350						
14	33	98	195	390	590	785	1200						
13	28	85	170	340	505	675	1000	1350					
12	24	72	145	290	430	575	865	1150	1450				
11	20	61	120	240	365	485	725	970	1200	1450			
10	17	50	100	200	300	400	600	800	1000	1200			
9	14	41	81	160	245	325	485	650	810	970			
8	11	32	64	130	190	255	385	510	640	770			
7	8	25	49	98	145	195	295	390	490	590			
6	6	18	36	72	110	145	215	290	360	430			
5.5	5	15	31	61	91	120	180	240	305	365			
5	4	12	25	50	75	100	150	200	250	300			
4.5	3	10	21	41	61	81	120	160	205	245			
4	3	8	16	32	48	64	95	130	160	190			
3.5	2	6	13	25	37	49	74	98	125	145			
3	2	5	9	18	27	36	54	72	90	110			
2.5	1	3	6	13	19	25	38	50	63	75			
2	1	2	4	8	12	16	24	32	40	48			
1.5	0	1	2	5	7	9	14	18	23	27			
1	0	1	1	2	3	4	6	8	10	12			



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HAWS Time Recording Sheet:

Name	Date	Tool used	Area of works	Start time	Finish time	Time used	Signature

HAWS Time Recording Sheet:

Name	Date	Tool used	Area of works	Start time	Finish time	Time used	Signature

HAWS Time Recording Sheet:

Name	Date	Tool used	Area of works	Start time	Finish time	Time used	Signature



Lawmens.

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HAVS Time Recording Sheet:

Name	Date	Tool used	Area of works	Start time	Finish time	Time used	Signature

28.4 Toolbox Talk	
Person Giving Talk:	Signature:
Subject of Talk:	Duration:
<p>The main points discussed in this toolbox talk are as follows:</p> <ul style="list-style-type: none"> • • • • • • • • • • <p>Date:</p>	

Please sign and date below to confirm the Lawmens Ltd Site Supervisor has verbally briefed you on the above toolbox talk and you have understood all of the above information:

Toolbox Talk Briefing Register		
Print Name	Signature	Date

Toolbox Talk Briefing Register		
Print Name	Signature	Date



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28.5 Scaffold Tower & Lifting Equipment (LOLER) Register

Make & Model	Identification Number	Date of Inspection	Inspected by	Date of next Required Inspection



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28.5 Scaffold Tower & Lifting Equipment (LOLER) Register

Make & Model	Identification Number	Date of Inspection	Inspected by	Date of next Required Inspection



28.6 - Scrap Metal Register

Date	Description of Scrap Metal	Picture Uploaded to System?	Total Weight (KGs)	No. Of Bins	Driver Name	Destination	Vehicle Reg	Vehicle Type

28.6 - Scrap Metal Register

Date	Description of Scrap Metal	Picture Uploaded to System?	Total Weight (KGs)	No. Of Bins	Driver Name	Destination	Vehicle Reg	Vehicle Type

28.7 - PAT Test & PUWER Equipment Register

Date	Tool	Serial / ID No.	PAT Test Date	Date for next PAT Test	Condition of Tool



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28.7- PAT Test & PUWER Equipment Register					
Date	Tool	Serial / ID No.	PAT Test Date	Date for next PAT Test	Condition of Tool

28.8 Accident Report Form:

Operatives should complete this form immediately upon becoming aware of a near miss, complaint or other incident which concerns the health and safety, or operation of the project.

The completed form should be passed to your site supervisor for review and actioning.

Details of the incident/near miss investigation
Site Address:
Client:
Date of incident:
Time of incident:
Injury sustained:
Details of the incident/accident:
Area on site where incident / near miss occurred:

Details of People Involved:
Name of injured person:
Name of person completing this form:
Name of Witness (If Applicable):
Date of report:

Additional Information:

Please add any supporting documents, photos or other information on the accident / incident here:

Please complete the section below to confirm that the information detailed above is a true and correct reflection of the incident / accident that occurred:

Injured Party details:
Name(s):
Signature(s)
Job Title(s):
Contact Number(s):
Further Comments:
Witness details:
Name(s):
Signature(s)
Job Title(s):
Contact Number(s):
Further Comments:
Person completing form:
Name(s):
Signature(s)
Job Title(s):
Contact Number(s):
Further Comments:

Corrective Actions and Incident / Accident Close out Measures:

Please detail below what measures have been taken to prevent this accident occurring again and any corrective actions that have taken place. Also detail whether the injured person has recovered fully and is back in work:

Corrective Actions / Close out Measures Summary:

Name of Person completing this section:

Signature of person completing this section:

Job Title of person completing this section:

Date Incident / Accident Closed Out:

28.9 Amendment to Methodology / Risks Document

If there is a change in circumstances on the project and the methodology for carrying out the works changes or risks associated are different to those listed, please detail these below and fully describe the amendment. Once completed please get this signed off by all operatives and site management to confirm all parties understand.

If this is NOT a change to methodology but is additional works not detailed in the original RAMS, please contact the office to amend the RAMS and re-issue.

Details of changes:

Acknowledgment of Amendment to Method of Work		
Print Name	Sign Name	Date

Lawmens Supervisor Sign: _____ **Print:** _____

Client Site Manager Sign: _____ **Print:** _____

28.11 Excavating Machine Info / Data Sheets

RULE THE GROUND

The HX Series exceeds customer's expectation!
Become a true leader on the ground with HCE's HX Series.

WORK MAX, WORTH MAX

- IPC (Intelligent Power Control) **Upgrade**
- Attachment Flow Control **Option**
- New Cooling System with Increased Air Flow
- Fuel Rate Information
- ECO Gauge
- New Cooling System with Increased Air Flow
- Enlarged Air Inlet with Grill Cover

MORE RELIABLE, MORE SUSTAINABLE

- Durable Cooling Module
- Reinforced Pin, Bush, and Polymer Shim
- Reinforced Durability of Upper and Lower Structure and Attachments
- Wear Resistant Cover Plate
- Hi-grade (High-pressure) Hoses

INFOTAINMENT FRONTIER

- Proportional Auxiliary Hydraulic System **Option**
- Quick Coupler Button **Option**
- New Front Side Air Conditioning Systems
- Intelligent and Wide Cluster
- New Air Conditioning System
- Audio System



MODERN COMFORT, SIMPLE AND SAFE SOLUTION

- AAVM (Advanced Around View Monitoring) Camera System **Option**
- HI MATE (Remote Management System) **Option**
- Swing Lock System **Option**
- Fine Swing Control **Option**
- Cab Suspension Mount

*Please refer to the optional equipment list.

SPECIFICATIONS

ENGINE	
Make/Model	DAEWOO / G5C
Type	6 Cylinder, water cooled, 4-cycle turbocharged, charge air cooled, direct injection, electronic controlled diesel engine
Gross Power	209 kW (280 HP) at 2,200 rpm
Net Power	205 kW (275 HP) at 2,200 rpm
Max. Power	224 kW (300 HP) at 2,000 rpm
Peak Torque	1,356 N·m (1,000 lb-ft) at 1,500 rpm
Displacement	8.3 l (536 cu in)

HYDRAULIC SYSTEM	
MAIN PUMP	
Type	Variable displacement tandem axis piston pumps
Max. Flow	24,297 l/min
Sub-pump for pilot circuit	Gear pump
Cross-sensing and fuel saving pump system.	

HYDRAULIC MOTORS	
Travel	Two speed axial piston motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING	
Implement circuits	350 kgf/cm ² (4,980 psi)
Travel	350 kgf/cm ² (4,980 psi)
Power boost (boom, arm, bucket)	380 kgf/cm ² (5,400 psi)
Swing circuit	300 kgf/cm ² (4,270 psi)
Pilot circuit	40 kgf/cm ² (570 psi)
Service valve	Installed

HYDRAULIC CYLINDERS	
Boom	2-Ø150 × 1,480 mm
Arm	1-Ø160 × 1,885 mm
Bucket	1-Ø140 × 1,285 mm

DRIVES & BRAKES	
Circ. method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	27,404 kgf (60,415 lbf)
Max. travel speed (high / low)	6.4 km/h (3.9 mph) / 3.5 km/h (2.1 mph)
Gradeability	35° (70%)
Parking brake	Multi wet disc

CONTROL	
Pilot pressure operated josticks and pedals with detachable lever provide almost effortless and fatigueless operation.	
Pilot control	Two josticks with one safety lever (R/L) Swing and arm (R/L) Boom and bucket (ISO)
Traveling and steering	Two levers with pedals
Engine throttle	Electric, dial type

SWING SYSTEM			
Swing motor	Fixed displacement axial piston motor		
Swing reduction	Planetary gear reduction		
Swing bearing lubrication	Grease-bathed		
Swing brake	Multi wet disc		
Swing speed	10.2 rpm		

COOLANT & LUBRICANT CAPACITY			
	liter	US gal	UK gal
Fuel tank	600	158.5	132
Engine coolant	25	6.6	5.5
Engine oil	35	9.2	7.7
Swing device	11	2.91	2.42
Final drive (each)	7.8	1.7	1.4
Hydraulic system (including tank)	414	109.4	91.06
Hydraulic tank	210	55.5	46.3

UNDERCARRIAGE	
The X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock absorbing springs and sprockets and a track chain with double or triple grouser shoes.	
Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	48 EA
No. of center roller on each side	2 EA
No. of track roller on each side	9 EA
No. of rail guard on each side	2 EA

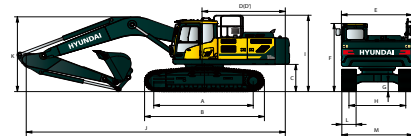
OPERATING WEIGHT (APPROXIMATE)	
Operating weight, including 6,450 mm (21' 2") boom, 3,200 mm (10' 6") arm, S45 heaped 1.44 m ³ (1.88 yd ³) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.	

OPERATING WEIGHT			
Shoes		Operating weight	Ground pressure
Type	Width	kg (lb)	kgf/cm ² (psi)
Triple grouser	600	HX350L 33,150 (73,083)	0.64 (9.07)
	700	HX350L 33,700 (74,340)	0.56 (7.91)
	800	HX350L 34,100 (75,178)	0.49 (7.00)

AIR CONDITIONING SYSTEM	
The air condition system for the machine contains the fluorinated greenhouse gas with global warming potential of R134a. (Global warming potential: 1,430) The system hold 0.8 kg refrigerant consisting of a CO ₂ equivalent 1.14 kg metric tonne. For more information, please refer to the manual.	

DIMENSIONS & WORKING RANGE

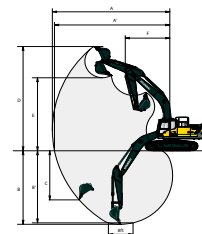
HX350L DIMENSIONS	
6.45 m (21' 2"), 6.15 m (20' 2") BOOM and 2.20 m (7' 3"), 2.50 m (8' 2"), 3.20 m (10' 6"), 4.05 m (13' 3") ARM	



Unit: mm (ft., in)

A Tumbler distance	4,030 (13' 3")	Boom length	6,150 (20' 2")	6,450 (21' 2")					
B Overall length of crawler	4,940 (16' 2")	Arm length	2,200 (7' 3")	2,500 (8' 2")	3,200 (10' 6")	4,050 (13' 3")			
C Ground clearance of counterweight	1,200 (3' 11")	J Overall length	11,160 (36' 7")	11,040 (36' 2")	10,910 (35' 10")	11,460 (37' 7")	11,340 (37' 2")	11,220 (36' 10")	11,210 (36' 9")
D Tail swing radius	3,570 (11' 9")	K Overall height of boom	3,690 (12' 0")	3,420 (11' 3")	3,420 (11' 3")	3,630 (11' 11")	3,540 (11' 7")	3,380 (11' 1")	3,870 (12' 8")
E Rear-end length	3,510 (11' 5")	L Track shoe width	600 (24")	700 (28")	800 (32")				
F Overall width of upperstructure	2,980 (9' 9")	M Overall width	2,680 (8' 10")	3,260 (10' 9")	3,480 (11' 5")				
G Overall height of cab	3,145 (10' 4")								
H Min. ground clearance	500 (1' 6")								
I Track gauge	2,680 (8' 10")								
J Overall height of guardrail (Opt)	3,950 (13' 0")								

HX350L WORKING RANGE



HX350L WORKING RANGE						
		Boom length	6,150 (20' 2")	6,450 (21' 2")		
Arm length	2,200 (7' 3")	2,500 (8' 2")	3,200 (10' 6")	4,050 (13' 3")		
A Max. digging reach on ground	10,020 (32' 9")	10,190 (33' 5")	10,840 (35' 7")	10,300 (33' 9")	11,550 (38' 1")	11,550 (38' 1")
B Max. digging reach	9,810 (32' 2")	9,980 (32' 7")	10,640 (34' 11")	10,120 (33' 2")	10,950 (35' 11")	11,770 (38' 7")
C Max. vertical wall digging depth	6,150 (20' 2")	6,450 (21' 2")	7,150 (23' 5")	6,360 (20' 9")	6,660 (21' 10")	7,360 (24' 2")
D Max. digging height	5,950 (19' 6")	6,230 (20' 5")	6,980 (22' 11")	6,170 (20' 3")	6,450 (21' 2")	7,200 (23' 7")
E Max. dumping height	5,700 (18' 7")	5,460 (17' 9")	6,100 (20' 0")	5,970 (19' 5")	5,660 (18' 7")	6,390 (21' 0")
F Min. swing radius	9,980 (32' 7")	9,760 (32' 0")	10,080 (33' 1")	10,260 (33' 8")	10,050 (32' 8")	10,360 (34' 0")
	6,790 (22' 3")	6,670 (21' 11")	6,960 (22' 8")	7,090 (23' 2")	6,990 (22' 10")	7,260 (23' 9")
	4,650 (14' 7")	4,290 (14' 1")	4,200 (13' 9")	4,630 (15' 2")	4,440 (14' 7")	4,360 (14' 4")