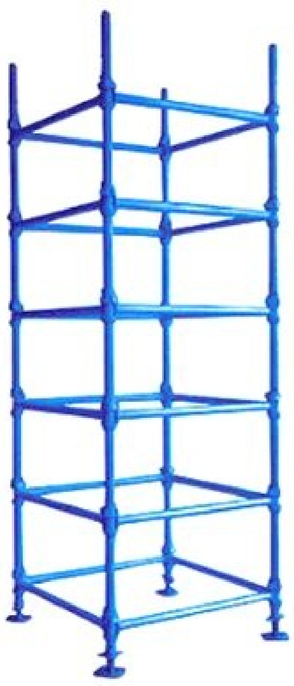
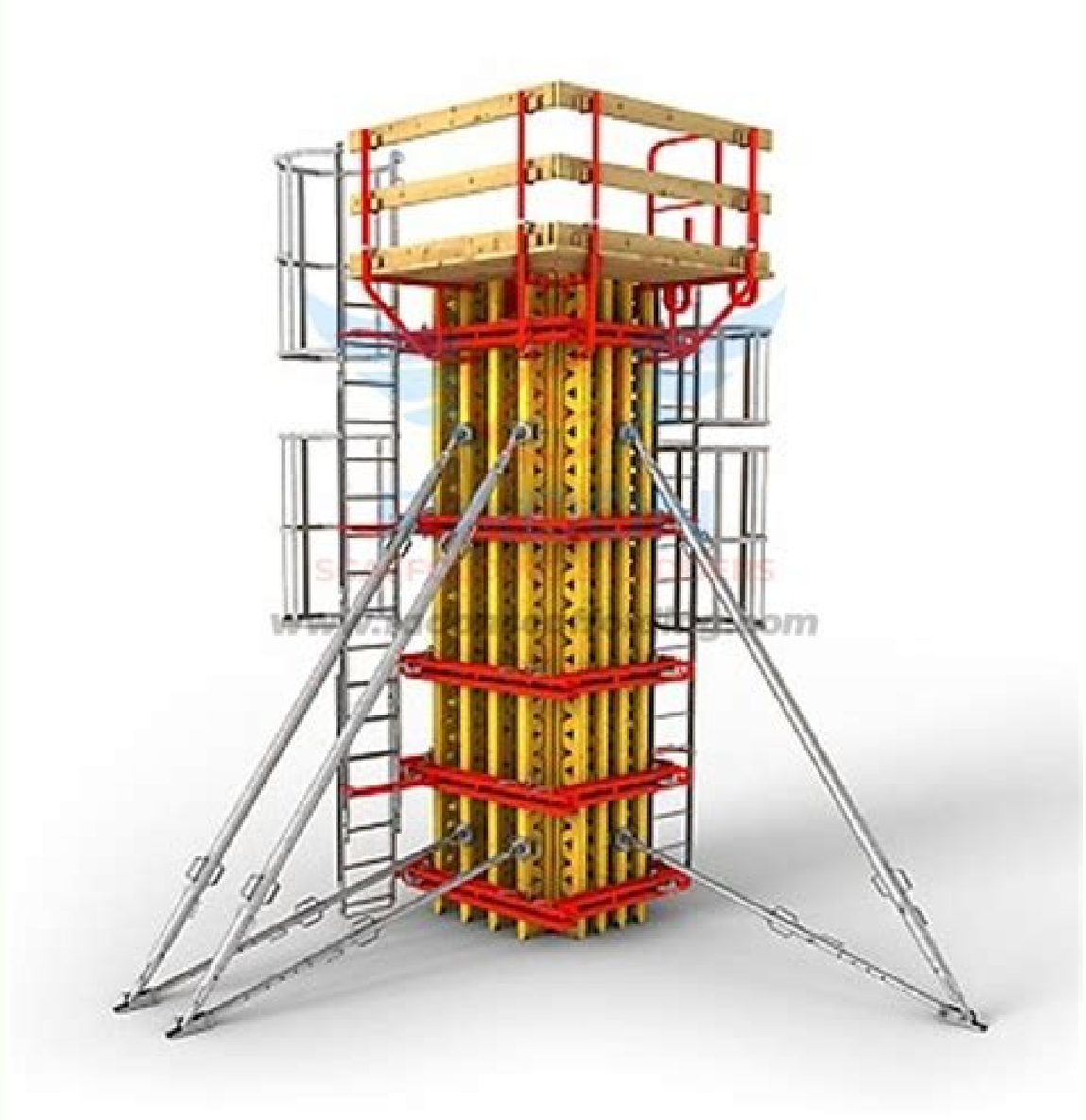
Cuplock scaffolding technical manual


RADON
SCAFFOLDING & LADDERS
www.radonscaffolding.com




Powered by DIYTrade.com



How to build cuplock scaffolding. Types of cuplock scaffolding. Cuplock scaffolding price.

WheelsScaffolding (India) Ltd.the scaffolding peopleAn ISO 9001:2000 Co.Modular Frameworkfor Construction IndustryUsers Manualformerly Wheels Fabricators Pvt. Ltd.WSL CUPLOCK is the worlds most widely used system scaffold. It is a fully painted/galvanised multi-purpose steel scaffold system suitable for providing general access and supporting vertical loads.CUPLOCKs key feature is its unique circular node point which allows up to 4 horizontals to be connected to avertical in a single fastening action -making it probably the fastest and safest system available.a WSL CThe comprehensive range of CUPLOCK components allows it to be used with traditional scaffold boards or battens. It can be used to create a huge range of access and support structures, staircase towers, circular scaffolds, loading towers and mobile towers.7 Tank phosph ting is the finest practical coating that can be applied to a scaffold system, providing a long working life and better handling. CUPLO K is manufactured to strict quality standards.This manual has been designed to enable CUPLOCK users to become proficient in planning and erecting conventional CUPLOCK scaffolds. It provides comprehensive details of components and guidance on the design and erection of access and support structures.IntroductionWSL CUPLOCK Formwork Support System The erection and application instructions Advantages contained in this booklet are the recommended Maximum leg load of 75* kN with a max grid methods to be used for WSL CUPLOCK spacing of 2.5m x 2.5m. products.* Maximum leg load is dependant on a set of The technical instructions contained in this conditions with regard to bracing, Ledger/ brochure must be accurately followed to achieve Transom spacing, load eccentricity, extension the correct function of the product. Any deviation of Adjustable Bases and U-Heads and out of from the recommended principles shownplumb of the system. Simple and efficient in this brochure may require a separate design interconnection of Ledgers and braces. and/or verification by the WSL Engineering Standards produced from 48.3 mm dia high Department.strength tube available in lengths up to 3.0m. Painted/Galvanised components for durability. The illustrations in these assembly instructions (all threaded components are zinc plated not are guidelines only.galvanised) Only WSL CUPLOCK Standards and WSL Choice of bay (grid) sizes to allow maximum CUPLOCK Adjustable Bases/Adjustable U-Head capacity of leg load to be developed. Assemblies must be used in the support Area below formwork can be decked out to structure.provide access or working platforms during The use of CUPLOCK Standards or any other erection and dismantling of soffit form. Adjustable Bases anywhere in the arrangement Fully systemised for ease of erection. reduces the leg load capacity of the structure to Minimum components and fittings. All parts that of the Standard CUPLOCK system and/or to are interchangeable. the capacity of the Adjustable Base used. Diagonal braces snap on to Ledgers at node Maximum capacities are only applicable for points and are easily dismantled by means of a equipment in good order and free from defects.quick release trigger. Designed and manufactured in accordance with required Standards.ImportantCUPLOCK Scaffolding Systemthe CUPLOCK locking procedureAt the heart of the CUPLOCK system is its unique node- It is this revolutionary node point which makes WSL point locking device. This enables up to four horizontals CUPLOCK faster and simpler to erect than any other to be loosely but safely connected to the standard then system scaffold. Once a CUPLOCK structure is based locked into position with a single hammer blow. The out and levelled, subsequent lifts are automatically system uses no loose clips, bolts or wedges. erected square and horizontal.The locking device is formed by fixed lower cups, welded The lack of loose components makes the system easy to to the standards at 0.5m intervals, and sliding upper use and exceptionally robust - its painted/galvanised cups which drop over the blade ends of the horizontals finish making it virtually immune to corrosion and and rotate to lock them firmly into place giving a positive, damage.rigid connection.General Technical &Application Manual150420500500500500500080One of the key strengths of the CUPLOCK system is the simplicity of the component range. Basic horizontals and verticals form the core of all structures. However, with the addition of a small number of special components, complex scaffolds can be constructed which safely address awkward access requirements.WSL CUPLOCK Spigoted Standards (Verticals)There are five basic sizes of spigotted Standards.Made from 48.3mm diameter x 3.2mm thick high grade steel tube, all standards incorporate lower fixed cups at 0.5m intervals with captive rotating top-cups securing up to 4 components. The lowest bottom cup is 80mm from the base of the standard to give the scaffold improved structural strength and reduce the need for base bracing in support structures. Access Standards incorporate a 150mm spigot at the top to allow the vertical connection of further standards. Provision for a locking pin is also provided. (CUPLOCK Support Standards do not have this spigot -allowing the insertion of jacks with various support components).WSLCUPLOCK 3.0 Standard CLS01 15.2WSLCUPLOCK 2.5 Standard CLS02 12.7WSLCUPLOCK 2.0 Standard CLS03 10.3WSLCUPLOCK 1.5 Standard CLS04 7.9WSLCUPLOCK 1.0 Standard CLS05 5.5WSL CUPLOCKName Code wt.(Kg)123m Cot ut poBGeneral Technical &Application ManualWSL Standards (Verticals) Open EndedThere are six basic sizes of open WSL CUPLOCK Standards.Made from 48.3mm diameter x 3.2mm thick high grade steel tube, all standards incorporate lower fixed cups at 0.5m intervals with captive rotating top-cups securing up to 4 components. The lowest bottom cup is 80mm from the base of the standard to give the scaffold improved structural strength and reduce the need for base bracing in support structures.WSLCUPLOCK 3.0 Open Ended Standard CLS06 14.5WSLCUPLOCK 2.5 Open Ended Standard CLS07 12.0WSLCUPLOCK 2.0 Open Ended Standard CLS08 9.6WSLCUPLOCK 1.5 Open Ended Standard CLS09 7.2WSLCUPLOCK 1.0 Open Ended Standard CLS10 4.8WSLCUPLOCK 0.5 Open Ended Standard CLS11 2.4Components in WSL CUPLOCKS1: Spigot.2: Heavy malleable casted top cup.3: Bottom cup.Name Code wt.(Kg)42050050050050050080Ledgers/HorizontalsCUPLOCK Ledgers are used as the main horizontal connecting members for the WSL CUPLOCK system.The Ledgers are manufactured from 48.3 mm O.D. tube with forged steel blade ends which locate into bottom cups of the Standards and are locked in place by the corresponding top cups.Ledgers are available in various lengths to provide the desired grid dimension when used with WSL CUPLOCK Standards for formwork support or Access Work System. Cuplock ledgers are available in B Class pipe as per customer requirement.CUPLOCK Ledger 2.50 CLL01 9.0 CLL08 7.8CUPLOCK Ledger 2.00 CLL02 7.1 CLL09 6.3CUPLOCK Ledger 1.8 CLL03 6.5 CLL10 5.7CUPLOCK Ledger 1.5 CLL04 5.5 CLL11 4.8CUPLOCK Ledger 1.25 CLL05 4.5 CLL12 4.0CUPLOCK Ledger 1.2 CLL06 4.4 CLL13 3.9CUPLOCK Ledger 1.0 CLL07 3.8 CLL14 3.3TransomsCUPLOCK Transoms made out of 50x50x5mm angle are used as a horizontal connecting member for the WSL CUPLOCK support system when a working platform is required, providing that it is not located in a position where system diagonal bracing is also required, as the braces cannot attach to a Transom, alternatively non system bracing may be used.Transoms are fabricated from twin structural steel angles fixed back to back with a drop forged blade attached to each end.The Transom secures to the Standard in the same manner as the Ledger. The outward standing bottom leg of the angles supports the steel planks in a captive manner to provide working platforms.Available in various lengths to suit a range of support grids and applications.CUPLOCK Transom 2.5 CLT01 18.94CUPLOCK Transom 2.0 CLT02 15.14CUPLOCK Transom 1.8 CLT03 13.62CUPLOCK Transom 1.5 CLT04 11.34CUPLOCK Transom 1.3 CLT05 9.82CUPLOCK Transom 1.2 CLT06 9.06CUPLOCK Transom 1.0 CLT07 7.54Name Wt.(Kg.)B Class A ClassName Code Wt.(Kg.)Code Code Wt.(Kg.)WSL CUPLOCKScaffolding SystemIntermediate TransomsIntermediate Transoms provide mid-bay support for

38mm scaffold boards by spanning between the inner and outer ledgers. The jaw section at each end is turned downwards to prevent dislocation. One end is provided with an integral locking device to prevent any movement along the ledgers during use. In addition to the standard 1.3m wide unit, shorter Intermediate Transoms are available for use where scaffold boards require support between hop-up brackets. They span between the inside ledger of the main scaffold and the ledger linking the hop-up brackets. For use with 2 board and 3 board hopup brackets respectively.CUPLOCK Intermediate Transom 2.5 CLI 01 12.59CUPLOCK Intermediate Transom 2.5 CLI 02 10.99CUPLOCK Intermediate Transom 2.0 CLI 03 9.39CUPLOCK Intermediate Transom 1.8 CLI 04 8.75CUPLOCK Intermediate Transom 1.5 CLI 05 7.79CUPLOCK Intermediate Transom 1.3 CLI 06 7.15CUPLOCK Intermediate Transom 1.2 CLI 07 6.83CUPLOCK Intermediate Transom 1.0 CLI 08 6.19Inside Board Transom: 1 and 2 B Full PDF PackageDownload Full PDF PackageThis PaperA short summary of this paper6 Full PDFs related to this paperDownloadPDF Pack You're Reading a Free Preview Page 9 is not shown in this preview. You're Reading a Free Preview Pages 13 to 24 are not shown in this preview. You're Reading a Free Preview Pages 28 to 30 are not shown in this preview. You're Reading a Free Preview Pages 34 to 45 are not shown in this preview. You're Reading a Free Preview Pages 49 to 52 are not shown in this preview. For further information on this product or any other products and services, please contact yourlocal branch:tel: 08705 288 388 email: www.sgb.co.ukSGB GroupHarsco House, Regent Park, 299 Kingston Road, Leatherhead, Surrey KT22 7SG Tel: 01372 381300 1006/CDP/5KCUPLOK USERS MANUALSGBCUPLOKUSERSMANUALSGB Cuplok cover 12/6/06 12:00 PM Page 1CONTENTS3PageIntroduction 5The CUPLOK locking procedure 6CUPLOK safety information 7General site safety 9Core components 11Scaffold system components 12Ancillary components 17Omega components for batten platforms 21Typical tubular CUPLOK access layouts 25Typical Omega access layouts 28Safe Working LoadsTubular components 31Omega components 32Bracing and Tying in 34Maximum heights 35Circular access 43Loading platforms 47Staircase towers 51Towers 81Support structures 832445.33 CUPLOK USER'S MANUAL_12 12/6/06 11:34 AM Page 25INTRODUCTIONSGB CUPLOK is the worlds most widelyused system scaffold. It is a fullygalvanised multi-purpose steel scaffoldsystem suitable for providing generalaccess and supporting vertical loads.CUPLOKs key feature is its uniquecircular node point which allows up to 4 horizontals to be connected to avertical in a single fastening action -making it probably the fastest and safestsystem available.The comprehensive range of CUPLOK componentsallows it to be used with traditional scaffold boardsor battens. It can be used to create a huge range ofaccess and support structures, staircase towers,circular scaffolds, loading towers and mobiletowers.Hot-dipped galvanizing is the finest practicalcoating that can be applied to a scaffold system,providing a long working life and better handling.SGB CUPLOK is manufactured to strict qualitystandards, maintained and audited worldwide bySGBs Quality Control Department.This manual has been designed to enable CUPLOKusers to become proficient in planning and erectingconventional CUPLOK scaffolds. It providescomprehensive details of components and guidanceon the design and erection of access and supportstructures.For further details on safe erection and dismantlingprocedures, please refer to the relevant SGB UserGuide. Should you require further advice regardingthe design of more complex applications, pleasecontact your local SGB Branch on: Tel: 08705 288 388ImportantAs with all scaffolding, CUPLOK should only beerected by trained personnel. SGB conducts arange of courses covering all aspects of assemblyand inspection for aluminium towers, scaffoldsystems and powered access. SGB providestrainees with recognised qualifications andcertificates in association with the relevantprofessional bodies. Related literature CUPLOK Scaffold Systems brochure CUPLOK Staircase Tower brochure CUPLOK Scaffold System User Guide Scaffold Decking User Guide Scaffold Tube, Fittings, Steel and Aluminium Beam User Guide SGB Guide to Formwork and ShoringThese brochures can be obtained from:your local SGB Branch (Tel: 08705 288 388)via www.sgb.co.uk or by e-mailing Associated SGB productsSGB supplies a comprehensive range of access andsupport systems as well as general site safetyproducts, groundworks and powered accessequipment including: Traditional tube and fittings Aluminium and GRP mobile access towers Aluminium, steel and GRP ladders and steps Low level mobile platforms and access systems Heavy duty storing systems for wall and soffit support Edge protection systems including EXTRAGUARD and ROOFGUARD Scissor lifts, mobile booms and mast-climbing platforms Site safety products4445.33 CUPLOK USER'S MANUAL_12 12/6/06 11:34 AM Page 476THE CUPLOK LOCKING PROCEDUREAt the heart of the CUPLOK system is its uniquenode-point locking device. This enables up to fourhorizontals to be loosely but safely connected to thestandard then locked into position with a singlehammer blow. The system uses no loose clips, boltsor wedges.The locking device is formed by fixed lower cups,welded to the standards at 0.5m intervals, andsliding upper cups which drop over the blade endsof the horizontals and rotate to lock them firmlyinto place giving a positive, rigid connection.It is this revolutionary node point which makesSGB CUPLOK faster and simpler to erect than anyother system scaffold. Once a CUPLOK structure isbased out and levelled, subsequent lifts areautomatically erected square and horizontal.The lack of loose components makes the systemeasy to use and exceptionally robust - itsgalvanised finish making it virtually immune tocorrosion and damage.CUPLOK SAFETY INFORMATIONSafety Information including harness requirement (SG4: 05) CUPLOK complies with BS EN 12811 and 12810. Safe Working Loads on platforms will vary between 0.75kN and 3kN per square metre depending on the configuration of the scaffold. See page 31 of this manual or contact your local branch for further information. To ensure safe erection, alteration and dismantling of scaffolding it is important that the procedures outlined in the NASC Guidance Note SG4:05 are followed. SG4 describes several safe methods of work, including the basic method used by scaffolders. Copies are available from the NASC. A further guidance booklet, SG4 05 YOU is also available from the NASC. It is aimed at the scaffolding erector and describes the basicmethod of safe erection of scaffolding as follows: A minimum of four boards placed from below for erectors and single guardrails installed as work progresses along each lift. Double guardrails and toe boardswill be required for end users. SG4:05 also requires that all scaffold erectors must wear a harness whilst erecting, dismantling and working on scaffolding. The Work at Height Regulations 2005 require that work at height is properly planned, organised and carried out by competent persons. For scaffolding work this would include those who design, procure, supply and erect the scaffolding.445.33 CUPLOK USER'S MANUAL_12 12/6/06 11:34 AM Page 698CUPLOK SAFETY INFORMATION GENERAL SITE SAFETY All working platforms from where a person could fall must be fitted with a double guardrail and toeboards. Do not overload the platform with bricks or other material. If materials are to be placed on the platform, load all heavy items as close to standards as possible and use brick-guard panelsto prevent any possibility of materials falling. If you need to stack large quantities of materials at platform level, use a CUPLOK Loading Tower. See page 47. All scaffolds require adequate bracing and tying in. No ties should ever be removed without adequate supervision. If necessary alternative tiesor bracing should be added first to ensure the continued safety of the scaffold.SGB CUPLOK has been designed from the outset to provide safety to scaffolders and users during erection, use and dismantling. No loose fittings are required, lower cups prevent the accidental dislodging of the ledgers, and guardrails are automatically positioned at the appropriate heights for the working platforms. However, the safety of the scaffold depends both on the people who erect it and that the scaffolding structure is not interfered with during use. Equipment checks following fall incidentsShould any SGB CUPLOK equipment be damagedin any way as the result of a fall from a scaffoldinvolving a harness, those components must be taken out of service and inspected by a competentperson.For your own safety and that of all thoseworking on the scaffold it is importantthat the following rules are obeyed: If the scaffold is on rough or uneven ground, ensure that it is erected on adequate timber sole plates - properly bedded and levelled. Make sure that the work platform contains no triphazards or projections. If ladders are used for access, ensure that they stand on a firm base, and are securely fixed at ornear the top. Also ensure that there is a safe handhold for getting on and off the working platform. On many occasions, staircases provide safe and convenient access for men and materials. See page 51.445.33 CUPLOK USER'S MANUAL_12 12/6/06 11:34 AM Page 811CORE COMPONENTSOne of the key strengths of the CUPLOKsystem is the simplicity of the componentrange. Basic horizontals and verticalsform the core of all structures. However,with the addition of a small number ofspecial components, complex scaffoldscan be constructed which safely address awkward access requirements.Access Standards (Verticals)Made from 48.3mm diameter x 3.2mm thick highgrade steel tube, all standards incorporate lowerfixed cups at 0.5m intervals with captive rotatingtop-cups securing up to 4 components. The