

ROLOGARD MOBILE VEHICLE SECURITY BARRIERS

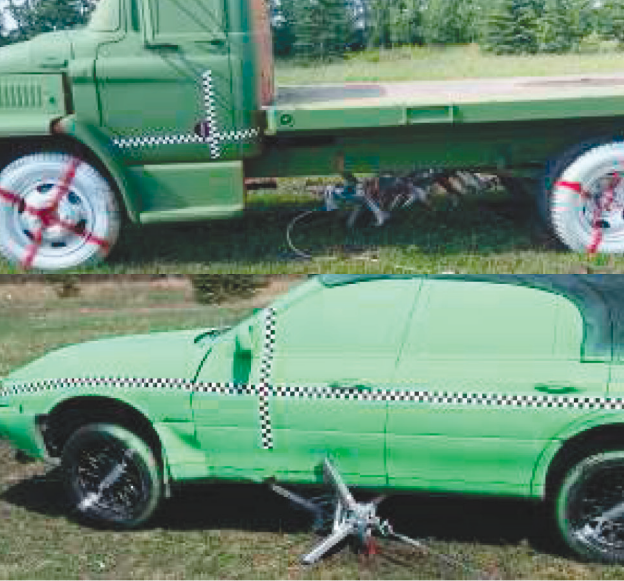
Technical Bulletin #19 (sd/hd, A, English)



**ROLOGARD
GLOBAL
COMPANY
LLC**

www.rologard.com

A solution for Vehicle-As-Weapon and Hostile Vehicle Mitigation



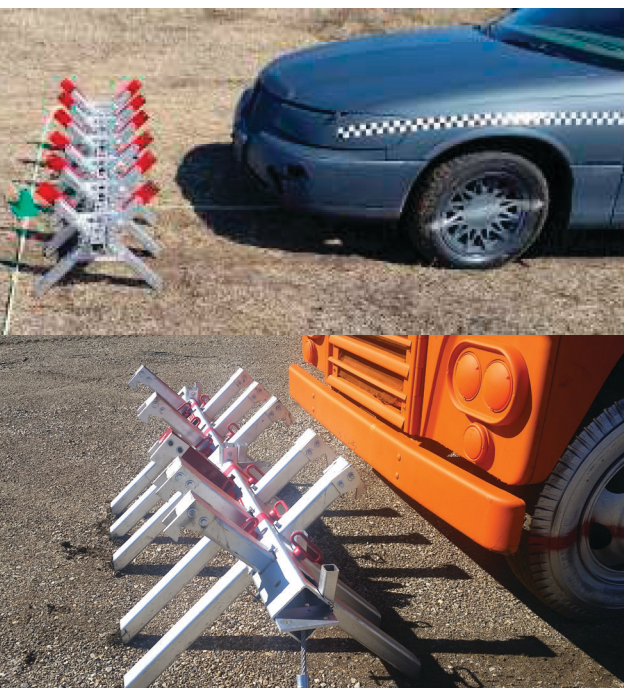
WELCOME TO OUR WORLD...

where product performance and extreme mobility combine to provide the most effective, rapidly deployed vehicle barrier system available anywhere... **Rologard.**

Anchored or unanchored, our Rologard K-2300sd standard duty mobile vehicle barrier can provide impact test proven capabilities in a multitude of settings and applications. From street corners to sod hike/bike pathways--Rologard provides a solution to VAW/HVM threats.



Rologard provides the worlds most complete line of highly mobile vehicle barriers-underbody disabling devices-coupled with a broad array of practical, safety-oriented, no-tools-needed, quick attach options. Our design, test and manufacture processes, all under one roof, have served the industry well.



Anchored or unanchored, our Rologard K-2400hd 10 spar heavy duty mobile vehicle barrier is well suited for most soil/pavement conditions and types. With heavier components and capable of faster transport speeds, the K- 2400hd may be your choice for your situation.



TABLE OF CONTENTS

About Us	Page 1
Random Placement Protocol.....	Page 2
Commentaries.....	Page 3
Barrier Comparisons	Page 4
Rologard K-2300sd Impact Data	Page 5
Base Unit and available options- K-2300sd	Page 7
General Dimensions- K-2300sd.....	Page 20
Kit Numbers- K-2300sd	Page 21
Specification- K-2300sd	Page 22
Rologard K-2400hd Impact Data	Page 24
Base Unit and available options- K-2400hd.....	Page 26
General Dimensions- K-2400hd	Page 33
Kit Numbers-K-2400hd.....	Page 34
Specification- K-2400hd	Page 35
Wearable+Logo Gear	Page 36
Kit Numbers.....	Page 37
Terms and Conditions	Page 38
Warranty+Performance	Page 39

All dimensions and weights herein are approximate. Rologard Global retains the right to change, alter and/or amend its products without notice or obligation.



ROLOGARD GLOBAL COMPANY

Home of Rologard Mobile Vehicle Security Barriers
www.rologard.com

... ABOUT US!

Welcome to our world - a world dedicated to the safety of everyone, everywhere. In this Technical Bulletin you'll find the most effective, transportable, field tested mobile vehicle security equipment available. Our managements' (involved in perimeter security equipment manufacturing starting in 1986) dedication, commitment and vision is focused on the greatest protection in the widest variety of applications, environments and situations.

We design, test and manufacture the Rologard products on our own campus with our own well trained, well motivated personnel. Admittedly we like to be in control and that focus allows us to bring innovative top quality products to the ever growing market for perimeter security equipment. The world moves quickly, the security threats evolve rapidly and the Rologard mobile vehicle security barriers provide an added layer of highly functional protection at a cost/benefit point unlike any other system or concept.

In the past most VAW attacks targeted infrastructure-buildings, bridges, ports-todays VAW attacks almost exclusively target pedestrian groups. Bad actors cruising locations to find non-hardened (without fixed position barriers like bollards, pop-ups, drop down arms) are difficult to track and respond to. Rologard barriers provide the extremely rapid, and effective, response to that kind of scenario. Fast, mobile and effective: quick to place, quick to remove.

That's what we do at Rologard Global Company... everyday.

Thanks for your interest; please log on to WWW.ROLOGARD.COM and view the crash impact videos of the Rologard product line. Contact us and we'll respond immediately-we have real people, at real desks, with real telephones/computers-that pride themselves on fulfilling your requests asap!

info@rologard.com

www.rologard.com

info@rologard.com

The threat is real; the threat is now. Unfortunately the threat becomes an action ever more frequently. **VEHICLES AS WEAPONS (VAW's)** now pose one of the most common-and effective-acts of terrorism in the world today. In the past five years VAW's represented over 60% of non-combat severe injury terror actions across the globe--VAW's will continue to be the low cost terror option for many groups and individuals. **AT RANDOM INCIDENTS (ARI'S)** continue their role as the most difficult to prevent. Random times coupled with random participants combine to require evolving methods and procedures to deter such attacks. Bad actors now surveil potential targets and base their act on human concentrations (crowds) and perceived perimeter security and hardening----then act immediately or later, hours or even days later. The bad actors seek a combination of no or few barriers (perimeter security) and lots of people. That combination is what makes **ROLOGARD MOBILE VEHICLE SECURITY BARRIERS** the premier, non-permanently placed, vehicle barrier system--worldwide--today!!

RANDOM PLACEMENT PROTOCOL

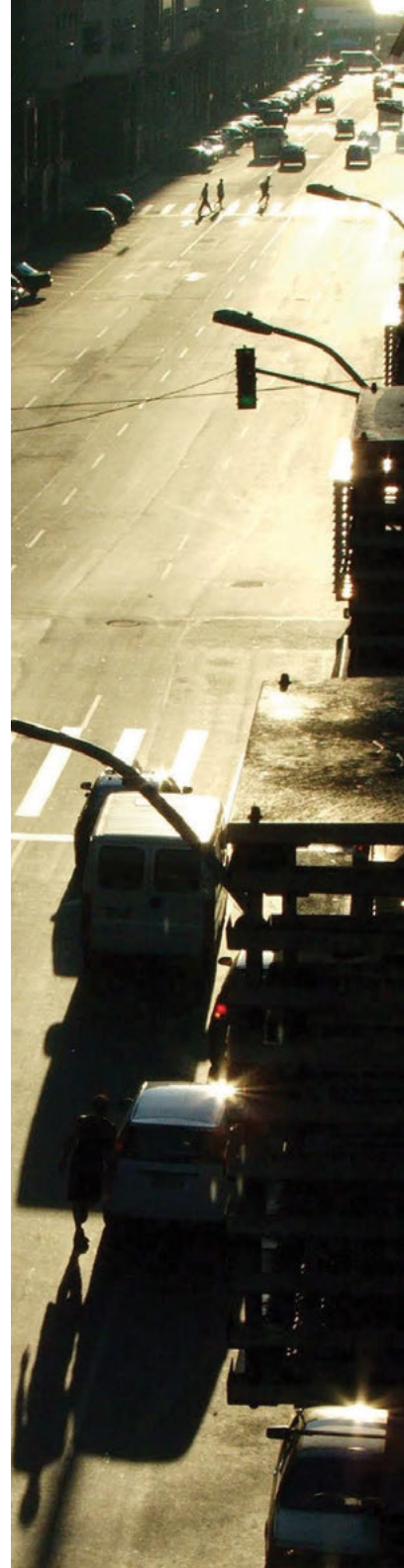
Rologard barriers are, above all, effective. HOSTILE VEHICLE MITIGATION is not an option--it's required. Crash tested proven product performance...with the absolute need of total mobility. Parade route, event center, hike/bike pathways, drive/ parkways, sidewalks, sally ports, main/rear gates.....anywhere a VAW threat may manifest itself. Effective and Mobile: crash test proven at Rologards' in-house design and development center and manufactured in a state of the art Rologard facility.

Rologard Mobile Vehicle Security barriers represent the very latest technology in the fight against VAW's. Ground level, situational professionals--law enforcement, security personnel and all staff involved see their observations turn, immediately, in to actionable barrier placement. **THERE IS NO TIME FOR ANYTHING ELSE!**
Placement is Prevention...

Rologard mobile vehicle security barriers are the standard in rapid placement high impact VAW mitigation. The Rologard is specifically manufactured as a vehicle barrier and not a pedestrian barrier-with pedestrian and infrastructure safety as the ultimate goal. Rologards **underbody vehicle disabling functionality** serves to protect against the widest array of vehicle types and, at the same time, provide the maximum limit to at-impact flying debris. Anchored linear arrangements of connected barriers may extend to nearly ten meters (five units) between anchor points. Unanchored arrangements allow maximum maneuverability and total versatility. All major Rologard components are designed with technologically advanced software and manufactured using precision production techniques, primarily laser cut metal fabrications. Professional product design; precision manufacturing; multi-stage product coating (primarily galvanizing) all combine to provide an extremely effective, high grade and long lasting security product.

Manufactured to international standards, the Rologard mobile vehicle security barriers may or may not comply with some or any of the following crash test standards per Rologard Globals' understanding and interpretation at the time of manufacture: PAS 68, 69, 170-1:2017; U.S. DoS/ASTM F 2656-15; ISO/IWA 14-2:2013; CWA 16221;ASTM F 3016, et.al.

Manufactured using the latest laser plate and laser tube cut technologies.





...the time from threat alert to actual attack gets shorter and shorter--**we can place a ROLOGARD in minutes**--anywhere...

...as chief of security I don't want hoses, wires or foundations of any kind--I want movable barrier protection--right now...

...our team doesn't have time for grease or leaking hoses or electrical shorts--Rologard units are basically maintenance free...

...fixed placement barriers remind me of the Maginot Line in World War 2, the bad guys just drive around them...

...smart people doing smart things--I truly believe that the Rologard concept is the real future in perimeter security...

...concrete jersey or diversity barriers are worthless, it takes forever to place them, then remove them and worse they slide all over...

...Rologard units are linkable, big event or small event, static crowd or people moving around--we follow with our wheeled units...

...don't even ask me about water filled barriers, it's -30c today, **Rologards work-sand, sod, cement, ice**, I love 'em...

...our view is we're most vulnerable after an initial attack, we can move 10, 20 even 30 meters of Rologard barriers in to place in 10 minutes or less...

...ban the guns, ban the knives--every major study says vehicle-as-a-weapon is the terrorist act most likely to occur in the future...

...the bollards are over there, but my guests--3000 event attendees just moved the other way--so did my Rologards...

...what I like is the zero debris dispersion--I can't have vehicle parts flying through the air--Rologards under body disabling concept is my choice...

...the institutions we represent want a short leash arrangement--we want design, test and manufacture teams at the end of one phone call. You get that with RologardGlobal...

...our first priority is crowd and pedestrian security, crowds and pedestrians are moving targets and I have to be able to move security with them...

...the Rologards are bi-directional--my street level security people just move it up and down the street they don't have to turn it around...

...the Rologard concept of random placement is very clever, the barrier may be in one place 10 minutes, 10 hours, 10 days--the attackers never know...

...Lone Wolf--meet Rologard, nothing is faster to deploy, in a wider variety of applications, situations and scenarios than a Rologard--unique and effective.

...I just like dealing with a focused company, their customer service is better than any supplier we have, a person actually answers the telephone...

...sometimes it comes down to cost--compared to any other barrier system the Rologard is much, much less; the cost of no barrier--could be incalculable...

...we don't dare have a barrier system that doesn't allow us to get our emergency services-ambulance/police/fire-in and out of an area quickly, Rologards can be moved in seconds...

...the mobility of these Rologards is unequalled--the street police literally push and pull these things all over--crank them up, crank them down, reposition them--the best thing to come along in years...

...operational training is always an issue--Rologard instructional manuals are superb, on-site instruction quick and informative, our people actually like using these units day in and day out...

...the obvious question is does it work and our observations are that the Rologard units, all things considered, are undoubtedly the way to go given rapidity of placement, price and proven impact performance...

...know this: one ROLOGARD costs less than the cost of one installed bollard--and the Rolo is way more efficient to use...

...situational awareness is of little value if you can't respond immediately--security makes the decision then and there, when and where; they never wait--beautiful concept...

...they call it Random Placement Protocol, we call it fast and functional. There is just nothing else like it for practical, effective and quick protection...

...it takes two--that's the way we look at Rologard setup, no need for big equipment, no cranes, no water tanks, no forklifts-- they just neatly stack and we pull them off when we need them--two people...

...no tool set-up/take-down--no designated trade/craft group needed to put a Rologard in place; makes it all so much faster...

...when they say no tools for set-up, they mean it. We're security people, not maintenance...

...crazy as it sounds our perimeter security problem has to do with the water table which is only about 10cm below our feet--even shallow mount barriers don't work...

...one officer can easily move 1, 2 or three of these units by him/herself--the Rologards cut off a wide array of attack angles--mobility, mobility, mobility

BARRIER COMPARISONS



Concrete “jersey” or “diversity” barriers are impossible to move without heavy equipment, are slow to install, require multiple craft/trade groups, often slide on impact, are aesthetically unpleasing and obtrude the inbound/outbound operation of emergency vehicles.



Water filled barriers rarely will disable let alone stop a vehicle at impact, are not an all-weather solution, require tankers to fill and are not mobile. They require exceedingly large amounts of space to store and may cause delays in emergency vehicle ingress/egress.



The ever popular pedestrian fence provides virtually no protection against a vehicle attack. While not designed to provide hostile vehicle mitigation many institutions only provide this kind of cursory protection.

In fact these are attack targets!



Fixed position barriers-no matter the location-often provide bad actors the opportunity to surveil other softer targets, they give bad actors time to target easier attack points. Fixed position barriers are expensive-to install, to maintain, to replace.

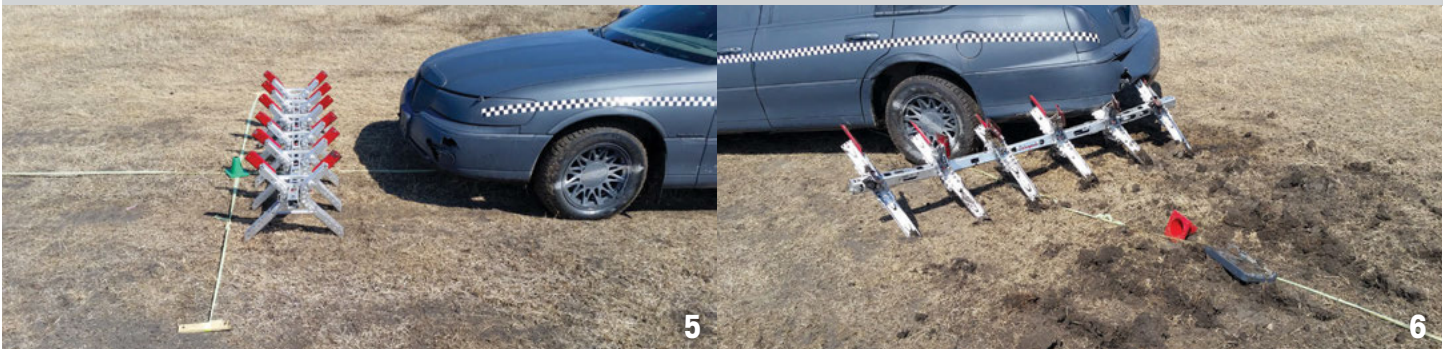
ROLOGARD K-2300sd Series Impact Data/Performance Rating

The following datum is consistent with recognized standard reporting protocols and is presented as:

Vehicle Brand/Type/Weight/Unanchored-Anchored/Speed/Impact Angle/Penetration/Lateral Displacement/Debris Displacement/Barrier Model. The nomenclature is in kilograms and kilometers where applicable; Penetration, Lateral Penetration and Debris displacement reference distance from point of impact, off center line, and dispersal of debris that exceeds 10kg in weight.

PERFORMANCE RATING: Lincoln/4ds/1795 kilograms/Unanch/37kph/90deg/6.1m/1.8m/0m/k2300sd

UNANCHORED IMPACT



Lincoln, 4 door sedan, weighing 1795 kilograms, unanchored, impact speed of 37 kilometers per hour, vehicle impacting barrier at 90 degree angle, penetration 6.1 meters from point of impact, displaced 1.8 meters off impact centerline, 0 meter of debris fly-out, rologard k2300 sd series mobile vehicle security barrier. The barrier was set in place, not anchored, on a clay type soil w/less than .002 mineral soil particles, 30 kPa moisture tension as per U.S. Dept. of Agriculture Natural Resources Service survey (9-25-2017).

PERFORMANCE RATING: Lincoln/4ds/1795 kilograms/Anch/41kph/90deg/1.9m/0.0m/0m/k2300sd

ANCHORED IMPACT



Lincoln, 4 door sedan, weighing 1795 kilograms, anchored, impact speed of 41 kilometers per hour, vehicle impacting barrier at 90 degree angle, penetration 1.9 meters from point of impact, displaced 0.0 meters off impact centerline, 0 meter of debris fly-out, rologard k2300 sd series mobile vehicle security barrier. The barrier was set in place, anchored w-1 meter anchors, on a clay type soil w/ less than .002 mineral soil particles, 30 kPa moisture tension as per U.S. Dept. of Agriculture Natural Resources Service survey (9-25-2017). Screw anchors attached to 12mm galvanized wire rope w/ galvanized shackles on each end of barrier.

ROLOGARD K-2300sd Series Impact Data/Performance Rating

PERFORMANCE RATING: Ford/250van/2440kg/Unanch/32kph/90deg/3.1m/.3m/0m/k2300sd

UNANCHORED IMPACT



Ford, F250 van, weighing 2440 kilograms, unanchored, impact speed of 32 kilometers per hour, vehicle impacting barrier at 90 degree angle, penetration 3.1 meters from point of impact, displaced .3 meters off impact centerline, 0 meter of debris fly-out, rologard k2300 sd series mobile vehicle security barrier. The barrier was set in place not anchored, on a clay type soil w/less than .002 mineral soil particles, 30 kPa moisture tension as per U.S. Dept. of Agriculture Natural Resources Service survey (9-25-2017).

PERFORMANCE RATING: Ford/250van/2440kg/Anch/39kph/90deg/4.0m/0.0mm/0m/k2300sd

ANCHORED IMPACT



Ford, F250 van, weighing 2440 kilograms, anchored, impact speed of 39 kilometers per hour, vehicle impacting barrier at 90 degree angle, penetration 4.0 meters from point of impact, displaced 0.0 meters off impact centerline, 0 meter of debris fly-out, rologard k2300 sd series mobile vehicle security barrier. The barrier was set in place, anchored w-1 meter anchors, on a clay type soil w/ less than .002 mineral soil particles, 30 kPa moisture tension as per U.S. Dept. of Agriculture Natural Resources Service survey (9-25-2017).

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Base Unit, K-2300sd, 6 Foldable Spar Mobile Vehicle Security Barrier, internal 12mm galvanized cable, cable end clevis, stackable.
Kit Number: sd100
Kit Weight: 77kgs



Base unit with standard spar tips, erect position.



Transport kit: handle, single wheel castor, height adjustable axle with flat proof 250mm diameter tires.
Maximum towing speed-10 kph.
Kit Number: sd 106
Kit Weight: 17kgs



Base unit (sd 100) with transport kit (sd 106), total Weight: 94 kgs.

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Tee Bar (2), Chain (2), Snap Hook (4),
Snap Pin (4).

Kit Number: sd 110

Kit Weight: 10kgs

This kit will not be available after March 1, 2019 except
for replacement part purposes. See Kit Number xd220.



Base Unit with Tee Bar kit.



Double sided stop sign with post (1) and snap pins (2).

Kit Number: xd 114

Kit Weight: 3.5kgs

Note: signs are available in 20+ languages, please
contact factory for additional information.



Double sided no walk sign with post (1) and snap pins (2).

Kit Number: xd 116

Kit Weight: 3.5kgs

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Double sided directional arrow sign with post (1) and snap pins (2).

Kit Number: xd 118

Kit Weight: 3.4kgs



Solar powered red light, off-steady-flashing, charges while off, includes cover sock, post (1), snap pins (2).

Kit Number: xd 122

Kit Weight: 3.6kgs

Note: Other colors available (blue, amber, white), please contact factory.



Screw anchors, kit includes 2 anchors and 2 clevis'.

1.8meter, Kit Number: xd 130, Kit Weight: 18kgs

1.2meter, Kit Number: xd 132, Kit Weight: 12kgs

0.9meter, Kit Number: xd 134, Kit Weight: 10kgs

0.6meter, Kit Number: xd 136, Kit Weight: 7kgs



Anchoring cables, kit includes 2 cables, 2 clevis', 12mm diameter cable, double swaged ends.

4.0meter, Kit Number: xd 140, Kit Weight: 6.5kgs

3.0meter, Kit Number: xd 142, Kit Weight: 6.0kgs

2.0meter, Kit Number: xd 144, Kit Weight: 5.5kgs

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Banner, mesh, Do Not Cross, posts (2) and hardware, approximate dimensions- 375mm x 1500mm.

Kit Number: xd 150

Kit Weight: 3.0kgs

Note: Banners are available in 20+ languages, please contact factory for additional information.



Banner, mesh, Customized Logo, posts (2) and hardware, approximate dimensions-375mm x 1500mm.

Kit Number: xd 152

Kit Weight: 3.0kgs

Note: Banners are available in 20+ languages, please contact factory for additional information. Click on the rologard.com website, rologard photos tab, for additional examples.



Banner, mesh, Random Placement, posts (2) and hardware, approximate dimensions-375mm x 1500mm.

Kit Number: xd 154

Kit Weight: 3.0kgs

Note: Banners are available in 20+ languages, please contact factory for additional information.



Rack, will accommodate 8 folded K-2300sd Rologard units, fork pockets on all four sides, shown with optional screw jack/castor option-see also Kit Number sd 172.

Kit Number: sd 170

Kit Weight: 216kgs

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Rack, storage, screw jack/castor option, includes 4 jack castor combinations, removable from Rack (sd170), mounting hardware.

Kit Number: sd 172

Kit Weight: 38kgs



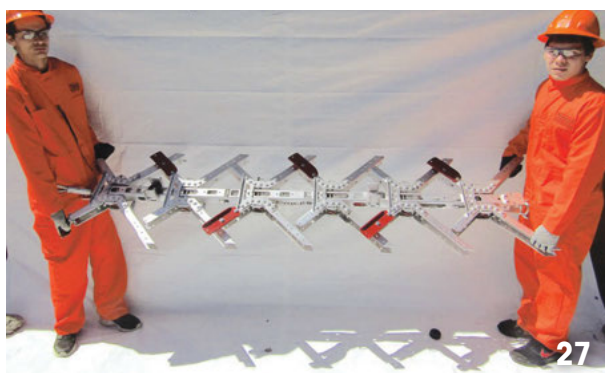
Storage box, fork pockets on all four sides, approximate dimensions-75cm high x 120cm square. Color may vary.

Kit Number: xd 180

Kit Weight: 185kgs



Custom color combinations are available. Current non-standard colors schemes include olive drab (shown) and black. Please contact the factory for further information.



Base unit Rologard K-2300sd readied for set-up by a two person team.

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Replacement spar with standard blunt spar tips.

Kit Number: rp-s12

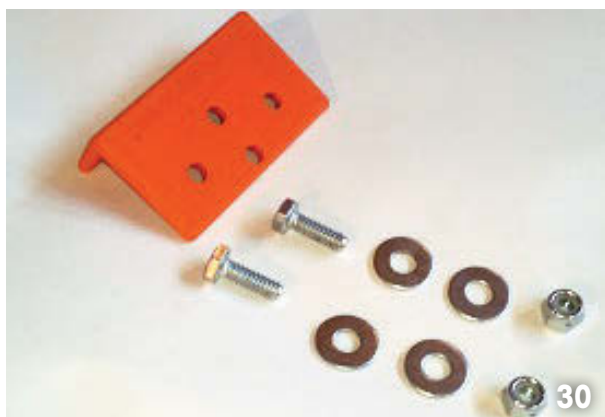
Kit Weight: 9.4kgs



Spar tips: double eagle, shark tooth, standard blunt.

Note: not all spar tip types are available in all jurisdictions.

Contact factory.



Standard blunt spar replacement tip cover clip and hardware. Clip material: LLDPE/plastic.

Kit Number: rp-s46

Kit Weight: N/A



Eagle beak spar tip.

Note: not all spar tip types are available in all jurisdictions.
Contact factory.

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Multiple K-2300sd units in tow behind ATV. Rologard recommends no more than five units towed at one time.

Maximum towing speed is 10kph.



ATV hitch, 32mm square (1 1/4"), with snap pin (1) and drop pin (1).

Kit Number: rp-x18

Kit Weight: 1.6kgs



ATV hitch (rp-x18) mounted to ATV.



K-2300sd base unit (sd 100), with transport kit (sd 106), with Tee bar/chain kit (sd 110).

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Slip hook with snap and clevis assembly.

Kit Number: rp-x20

Kit Weight: 2.2kgs



Base unit K-2300sd (sd100), with Tee bar/chain kit (sd110), with double sided stop sign kit (xd114).



All Rologard mobile vehicle security barriers are serialized and tagged. Our database, where applicable, tracks all impacts worldwide providing our development team a near real-time product improvement process.

Noted: replacement serial number tags are not offered nor will be provided once the barrier(s) have shipped from the Rologard factory.



Stay Clear warning decal. (Part Number: rolo 10204), Includes 2 decals.

Kit Number: rp-x28

Kit Weight: N/A

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



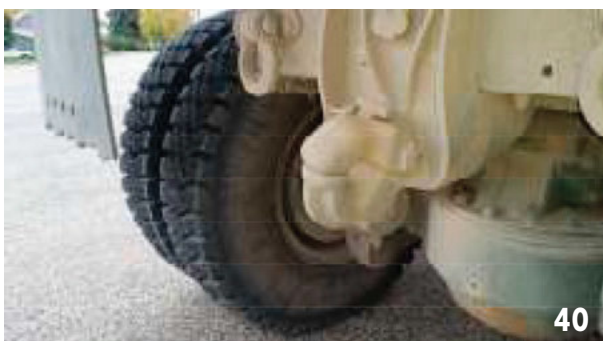
Anchoring cable and clevis connected to installed screw anchor. Soil type and elasticity data should be evaluated prior to determining screw anchor length and location.

Always confirm there are no underground obstacles including electric, gas or other utilities before installing screw anchors.



Anchoring cable attached to K-2300sd barrier and screw anchor. Shown with anchoring cable. The maximum distance from fixed anchor point to barrier end connection is 4 meters.

Kit Number: xd-142



Potential cable anchoring point--military truck pintle hook.



Potential cable anchoring point-- attached to the hitch of a truck. Site specific evaluations must be made in terms of potential attack speeds, surface types (where screw anchors cannot be installed-such as concrete streets etc.), aesthetic concerns, size of anchoring vehicle and anchoring vehicle footprint, and other considerations.

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Center tube and cable, with clevis.

Kit Number: rp-s30 (tube), rp-s32 (cable)

Kit Weight: 18.4kgs , 1.7kgs



Replacement chains (2) and snap hooks (2) for the sd100 tee bar option.

Kit Number: rp-s32

Kit Weight: 1.8kgs



Clevis, screw type,galvanized, minimum 12mm.

Kit Number: rp-x38

Kit Weight: .10kgs



Snap pin, minimum 9mm diameter.

Kit Number: rp-x40

Kit Weight: N/A

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Drop pin. 150mm length x 12mm diameter.

Kit Number: rp-x44

Kit Weight: N/A

Drop pin. 225mm length x 12mm diameter.

Kit Number: rp-x45

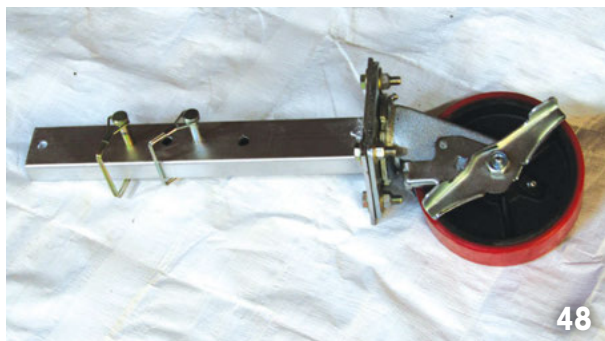
Kit Weight: N/A



Snap hook.

Kit Number: rp-x46

Kit Weight: N/A



Castor assembly for K-2300sd barrier.

RGC may substitute flat proof rubber/poly castor where appropriate.

Kit Number: rp-s39

Kit Weight: 5.3kgs



Replacement handle for K2300-sd with drop pin.

Kit Number: rp-s41

Kit Weight: 2.7kgs

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Replacement flat proof tire/wheel assembly for K-2300sd barrier.

Kit Number: rp-s45

Kit Weight: 1.5kgs



Base unit (sd100) with transport kit (sd106) with tee bar kit (sd110) with solar light kit (xd122).



Rack (sd170) with rack castor kit (sd172).
Color may vary.



Four fork pocket rack positioned sideways on flat bed trailer.

BASE UNIT AND AVAILABLE OPTIONS- K-2300SD



Screw anchor, subsurface, after installation, with screw type clevis affixed.

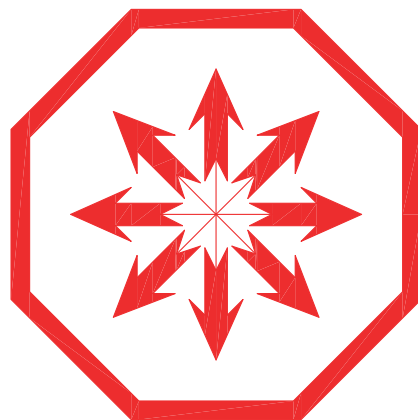
Always confirm there are no underground obstacles including electric, gas or other utilities before installing screw anchors.



Very large tree used as cable anchor. Extra caution should be taken when using a tree as an anchor. Contact a professional arborist.

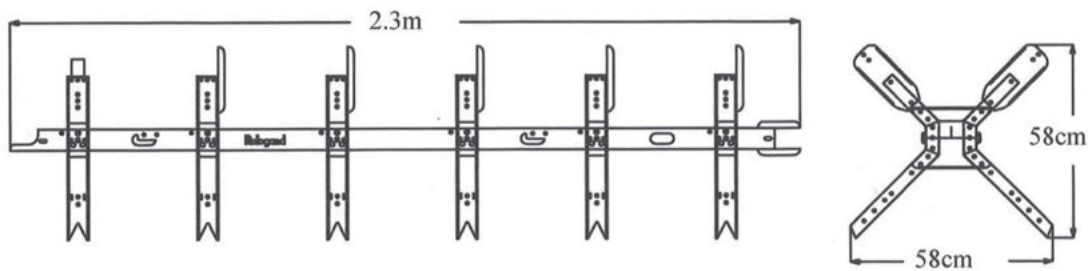


Never use a fire plug or any public utility, including but not limited to, water hydrants, gas lines, electrical or communication points for anchoring Rologard vehicle barriers.

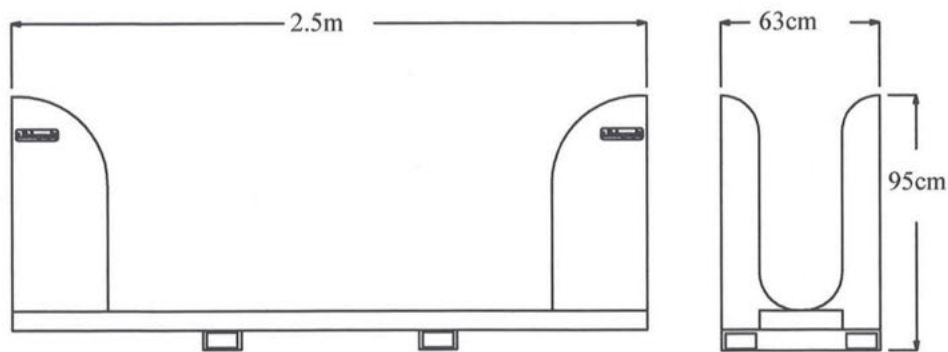


ROLOGARD K-2300sd

General Product Dimensions Six Foldable Spars



Base Unit Kit Number: sd100, Weight- 77kgs



Rack Storage Unit Kit Number: sd170, Weight- 230kgs
(Not Including 4 jack/castor assemblies, sd 172)

Kit Number Prefix Designations:

sd-standard duty unit, hd-heavy duty unit, xd-interchangeable kits (sd+hd), rp-repair and/or replacement parts, wbl-wearable gear.

K-2300sd

Kit Number:

sd 100	Base unit
sd 106	Transport kit-axle, castor assembly, handle
sd 110	Tee bars kit, not available after March 1, 2018, see xd220
sd 170	Rack, 8 base unit storage capacity
sd 172	Rack jack/castor kit
xd 114	Double side stop sign, post 1, snap pins 2
xd 116	Double side no walk Sign, post, snap pins
xd 118	Double side arrow sign, post, snap pins
xd 122	Solar powered light, post, snap pins
xd 130	Screw anchor and clevis, 1.8 meter
xd 132	Screw anchor and clevis, 1.2 meter
xd 134	Screw anchor and clevis, .9 meter
xd 136	Screw anchor and clevis, .6 meter
xd 140	Anchoring cables, clevis', 4 meter
xd 142	Anchoring cables, clevis', 3 meter
xd 144	Anchoring cables, clevis', 2 meter
xd 150	Banner, mesh, Do Not Cross, posts and hardware
xd 152	Banner, mesh, Customized Logo, posts and hardware, contact factory
xd 154	Banner, mesh, Randomly Placed, posts and hardware
xd 180	Storage box
rp s12	Spar with standard blunt spar tips
rp s30	Center tube
rp s32	Center tube cable+clevis
rp s36	Tee bar kit replacement chains
rp s39	Castor assembly
rp s41	Handle assembly
rp s45	Tire/wheel
rp s46	Blunt spar tip cover clip+hardware
rp x18	ATV hitch
rp x20	Slip hook
rp x28	Stay clear decal
rp x38	Clevis
rp x40	Snap pin
rp x44	Drop pin 6", 150mm
rp x45	Drop pin 9", 225mm
rp x46	Snap hook

Specification

This document may be used as a written specification for the Rologard K-2300sd mobile vehicle barrier, as a basis for Request for Quotation (RFQ's), Invitation to Bid (ITB) or other statements of interest. Please review www.rologard.com for specification updates, changes and revisions. (January 1, 2019)

Paragraph 1-The intent of this written specification is to describe a mobile vehicle security barrier system. The purpose of said system is to act as a deterrent to vehicles being used to impact and harm pedestrians and/or infrastructure such as buildings, bridges and ports. The general design of the unit is of fabricated metal components, movable and purposely positioned in or on sites determined to be likely targets and/or points of attack and impact from said vehicles.

Paragraph 2-With the assistance of two people, the barrier shall be of a design that, for storage purposes, shall be foldable and stackable, to a maximum height of eight stacked units. Made available as an option shall be a storage rack specifically designed for the storage and transport of up to eight base unit barriers. With the assistance of two people said vehicle barrier, in its base unit configuration, shall be capable of being assembled, without use of tools, to an upright and operable condition and shall resemble, generally, an X type configuration. The maximum weight of said base unit barrier shall not exceed eighty kilograms. In its upright and operable condition the barrier base unit shall not exceed 2.4 meters in length and 60 centimeters in width and height. The base unit, via a horizontally displaced center member, hollow tubular in shape, shall integrate six foldable spar units, said spar units shall be removable and replaceable. Said horizontally displaced center member shall hold and carry an internally located flexible member-steel cable, with affixed loops on both cable ends with one cable end to include a screw type clevis.

Paragraph 3-Notwithstanding paragraph 2 the storage rack, as an option, shall include four independently attached corner mounted castor and jack assemblies to ease the movement of the storage rack. Said storage rack shall have fork lift pocket access on four sides of the storage rack. The base barrier unit shall include, at its front most point, a tang with vertically displaced pin hole, and at its rear most point, a top and bottom hammer strap arrangement, to facilitate hooking one unit to another affixed by a drop pin. The base unit barrier shall include a permanent, riveted in place, serial number tag.

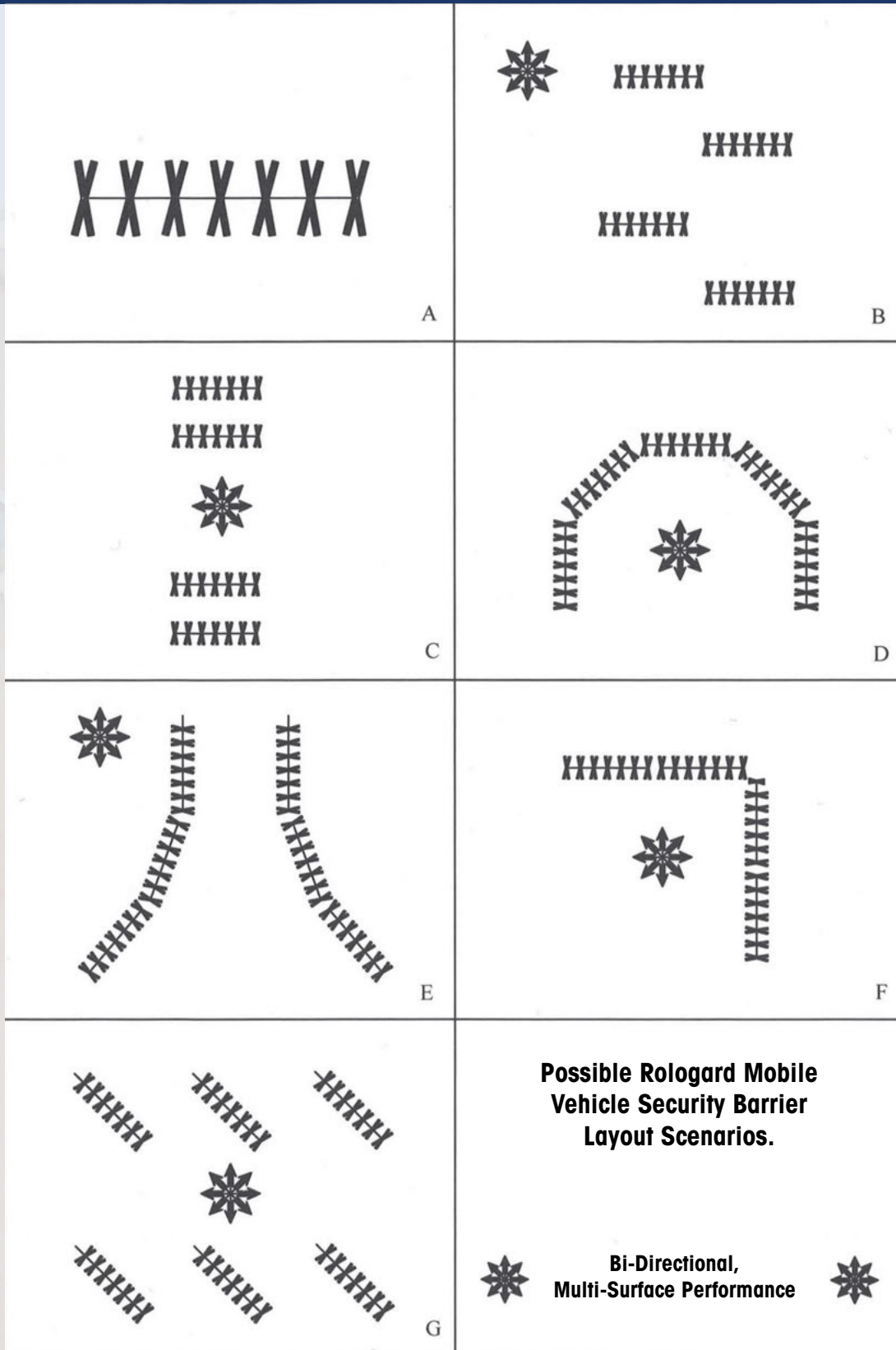
Paragraph 4- A variety of optional and attachable equipment shall be made available for the base barrier unit: A flat proof two tire assembly with single wheel urethane castor with pin on handle shall be available and identified as Optional Transport Kit; a pedestrian protection kit including two tee bars with link chains and hardware shall be available and identified as Optional Twin Post Chain kit; a double sided stop sign with post and hardware shall be available and identified as Optional Stop Sign kit; a double sided no walk sign with post and hardware shall be available and identified as Optional No Walk kit; a double sided arrow directional sign with post and hardware shall be available and identified as Optional Arrow kit; a solar powered light with post and hardware shall be available and identified as Optional Light kit.

The aforementioned equipment specification describes a Rologard K-2300sd mobile vehicle security barrier and its available optional equipment. RGC reserves the right to change, alter and/or amend its design specifications without notice or obligation.

www.rologard.com

SAND, SOD, CEMENT, ICE...

ROLOGARD PERFORMANCE+



ROLOGARD K-2400hd Series Impact Data/Performance Rating

The following datum is consistent with recognized standard reporting protocols and is presented as:

Vehicle Brand/Type/Weight/Unanchored-Anchored/Speed/Impact Angle/Penetration/Lateral Displacement/Debris Displacement/Barrier Model. The nomenclature is in kilograms and kilometers where applicable; Penetration, Lateral Penetration and Debris displacement reference distance from point of impact, off center line, and dispersal of debris that exceeds 10kg in weight.

PERFORMANCE RATING: Dodge/4dr p-u/2232kg/Unanch/34kph/90deg/3.3m/.3m/0m/k-2400hd

UNANCHORED IMPACT



55



56

Dodge, 4 door pickup, weighing 2232 kilograms, unanchored, impact speed of 34 kilometers per hour, vehicle impacting barrier at 90 degree angle, penetration 3.3 meters from point of impact, displaced .3 meters off impact centerline, 0 meter of debris fly-out, rologard k-2400hd series mobile vehicle security barrier. The barrier was set in place not anchored, on a clay type soil w/less than .002 mineral soil particles, 30 kPa moisture tension as per U.S. Dept. of Agriculture Natural Resources Service survey (9-25-2017).

PERFORMANCE RATING: Dodge/4dr p-u/2232kg/Anch/34kph/90deg/1.3m/.2m/0m/k-2400hd

ANCHORED IMPACT



57



58

Dodge, 4 door pickup, weighing 2232 kilograms, anchored, impact speed of 34 kilometers per hour, vehicle impacting barrier at 90 degree angle, penetration 1.3 meters from point of impact, displaced .2 meters off impact centerline, 0 meter of debris fly-out, rologard k-2400hd series mobile vehicle security barrier. The barrier was set in place and anchored w 1-meter anchors, on a clay type soil w/ less than .002 mineral soil particles, 30 kPa moisture tension as per U.S. Dept. of Agriculture Natural Resources Service survey (9-25-2017).

ROLOGARD K-2400hd Series Impact Data/Performance Rating

PERFORMANCE RATING: Dodge/flat bed/3955kg/Unanch/41kph/90deg/4.1m/.2m/0m/k-2400hd

UNANCHORED IMPACT



Dodge, flat bed truck, weighing 3955 kilograms, unanchored, impact speed of 41 kilometers per hour, vehicle impacting barrier at 90 degree angle, penetration 4.1 meters from point of impact, displaced .2 meters off impact centerline, 0 meter of debris fly-out, rologard k-2400hd series mobile vehicle security barrier. The barrier was set in place not anchored, on a clay type soil w/less than .002 mineral soil particles, 30 kPa moisture tension as per U.S. Dept. of Agriculture Natural Resources Service survey (9-25-2017).

PERFORMANCE RATING: Dodge/flat bed/3941kg/Anch/39kph/90deg/4.1m/.2m/0m/k-2400hd

ANCHORED IMPACT



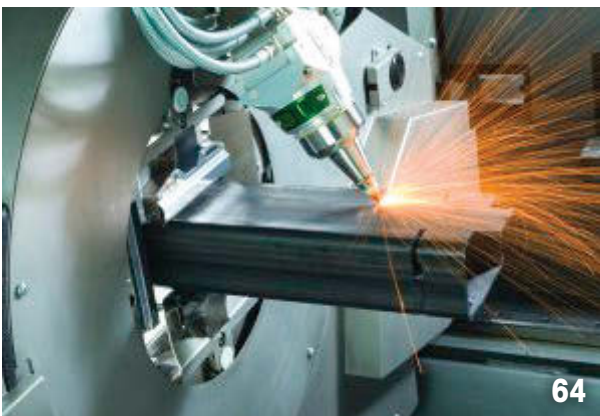
Dodge, flat bed truck, weighing 3941 kilograms, anchored, impact speed of 39 kilometers per hour, vehicle impacting barrier at 90 degree angle, penetration 2.9 meters from point of impact, displaced .7 meters off impact centerline, 0 meter of debris fly-out, rologard k-2400hd series mobile vehicle security barrier. The barrier was set in place and anchored w 1-meter anchors, on a clay type soil w/ less than .002 mineral soil particles, 30 kPa moisture tension as per U.S. Dept. of Agriculture Natural Resources Service survey (9-25-2017). Noted: This was the 4th impact experienced by 1 meter anchors.

BASE UNIT AND AVAILABLE OPTIONS- K-2400HD



Base unit, K-2400hd, 10 Removable Spar Mobile Vehicle Security Barrier, internal 12mm galvanized cable, cable end clevis, easily disassembled; not including hitch arrangement (see hd228, hd229,hd230).

Kit Number: hd200
Kit Weight: 154kgs

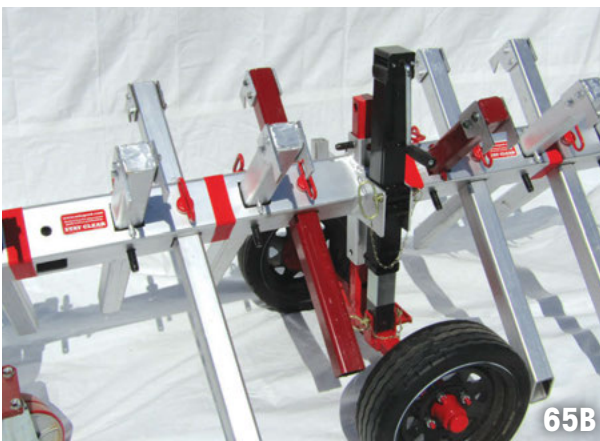


Virtual/real time manufacturing of our k2400hd splaying spar components, assuring the highest precision+produced efficiently-on the Trumpf TruLaser 7000 tube laser. It's fast and clean.



Transport kit including handle, dual wheel adjustable height castor, axle with 450mm diameter flat proof wheel/tires, axle screw jack, hardware.

Kit Number: hd208
Kit Weight: 58.5kgs



Base unit (hd200), Transport kit (hd208); height adjusting+removable screwjack is mountable on either left or right side of barrier.

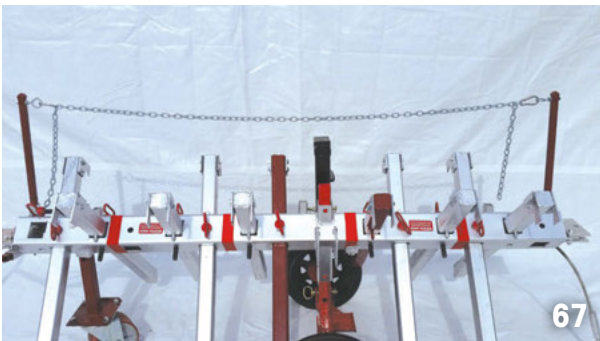
BASE UNIT AND AVAILABLE OPTIONS- K-2400HD



Twin post kit, chain, snap pins, snap hooks.

Kit Number: xd 220

Kit Weight: 5.1kgs



Base unit (hd200), Transport kit (hd208),

Twin Post kit (xd220).



Double sided stop sign, hardware.

Kit Number: xd114

Kit Weight: 3.5kgs



Double sided no walk sign, hardware.

Kit Number: xd 116

Kit Weight: 3.5kgs

BASE UNIT AND AVAILABLE OPTIONS- K-2400HD



Double sided directional arrow sign with post, hardware.

Kit Number: xd 118

Kit Weight: 3.4kgs



Solar powered red light, off-steady-flashing, charges while off, includes cover sock, post, hardware.

Kit Number: xd 122

Kit Weight: 3.6kgs



Spar pin and hair clip, 150mm x 18mm diameter.

Kit Number: xd 123

Kit Weight: N/A



Long Link Lashing chain, 3 meters, 12mm diameter.

Kit Number: xd 124

Kit Weight: 9.6kgs

BASE UNIT AND AVAILABLE OPTIONS- K-2400HD

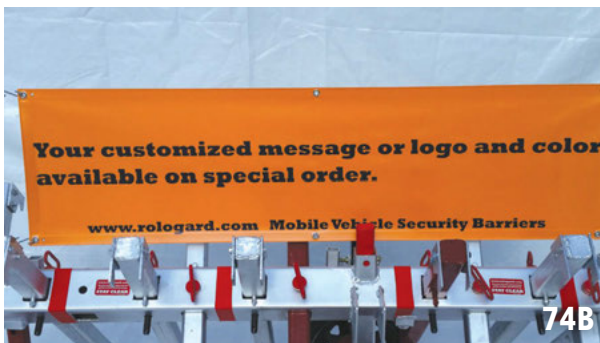


Banner, mesh, Do Not Cross, posts (2) and hardware, approximate dimensions- 375mm x 1500mm.

Kit Number: xd 150

Kit Weight: 3.0kgs

Note: Banners are available in 20+ languages, please contact factory for additional information.



Banner, mesh, Customized Logo, posts (2) and hardware, approximate dimensions-375mm x 1500mm.

Kit Number: xd 152

Kit Weight: 3.0kgs

Note: Banners are available in 20+ languages, please contact factory for additional information. Click on the rologard.com website, rologard photos tab, for additional examples.



Banner, mesh, Random Placement, posts (2) and hardware, approximate dimensions-375mm x 1500mm.

Kit Number: xd 154

Kit Weight: 3.0kgs

Note: Banners are available in 20+ languages, please contact factory for additional information.

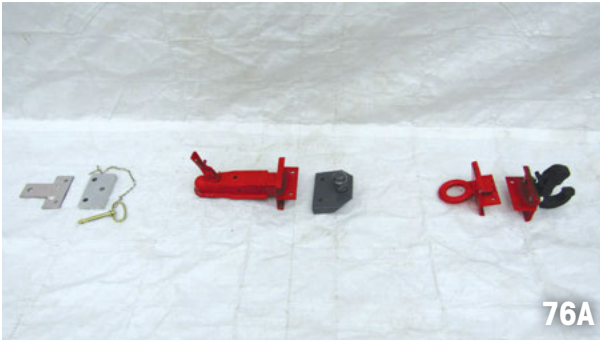


Storage box, fork pockets on all four sides, approximate dimensions-75cm high x 120cm wide x 2.7m long. This storage box is usually used with the k2400hd barriers. Color may vary.

Kit Number: xd 181

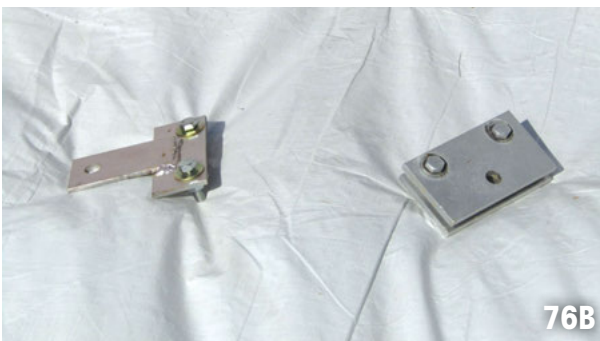
Kit Weight: 358kgs

BASE UNIT AND AVAILABLE OPTIONS- K-2400HD



There are 3 hitch arrangements that complement the transport kit. The 3 available arrangements are: tang and hammerstrap, coupler and ball, pintle ring and hook.

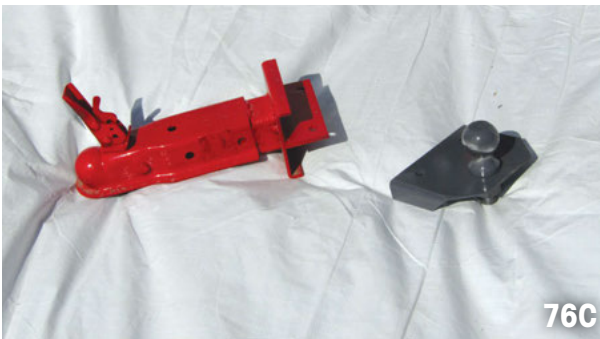
****When ordering the transport kit, indicate which hitch arrangement you want (one hitch arrangement is included with the transport kit).***



Tang and hammerstrap arrangement, hardware.

Kit Number: hd 228

Kit Weight: 1.9kgs



50mm coupler and 50mm (2") ball arrangement, hardware.

Kit Number: hd229

Kit Weight: 4.2kgs



75mm pintle ring and latchable hook arrangement, hardware.

Kit Number: hd 230

Kit Weight: 10.7kgs

BASE UNIT AND AVAILABLE OPTIONS- K-2400HD



Replacement wheel/tire for hd 208 transport kit.

Kit Number: rp-h74

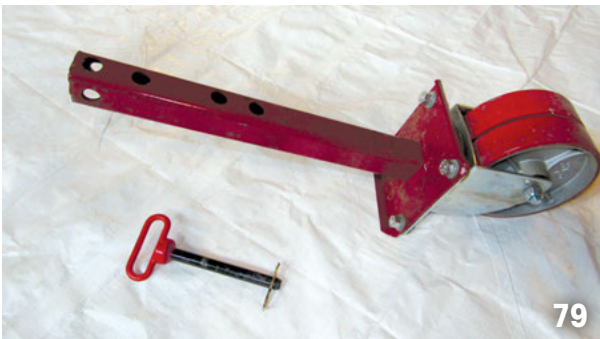
Kit Weight: 5.8kgs



Replacement hub, spindle, bearings, seal, nut, dust cap, cotter pin, assembly for hd 208 transport kit.

Kit Number: rp-h78

Kit Weight: 4.9kgs



Replacement dual wheel castor and pin for transport kit hd 208. RGC may substitute flat proof rubber/poly tire where appropriate.

Kit Number: rp-h69

Kit Weight: 14.2kgs



Replacement handle for transport kit hd 208, hardware.

Kit Number: rp-h71

Kit Weight: 2.8kgs

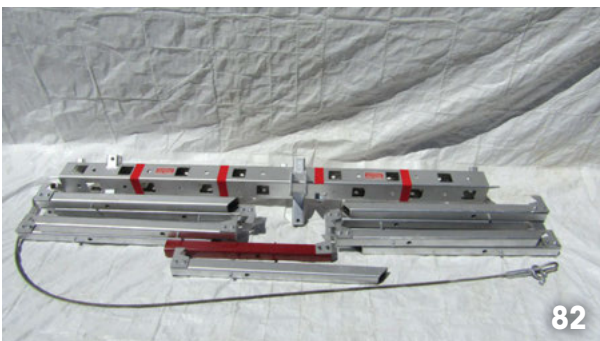
BASE UNIT AND AVAILABLE OPTIONS- K-2400HD



Replacement screwjack w/2 drop pins.

Kit Number: rp-h79

Kit Weight: 6.6kgs



Disassembled base unit (hd200). Maximum single piece weight: 35.2 kgs



Base unit (hd200), Transport kit (hd 208), Twin post chain kit (hd220), Double sided stop sign (xd114), Solar powered light (xd122), Banner-Do Not Cross (xd150).



K2400hd: Spar cap (top), rubber, with hardware.

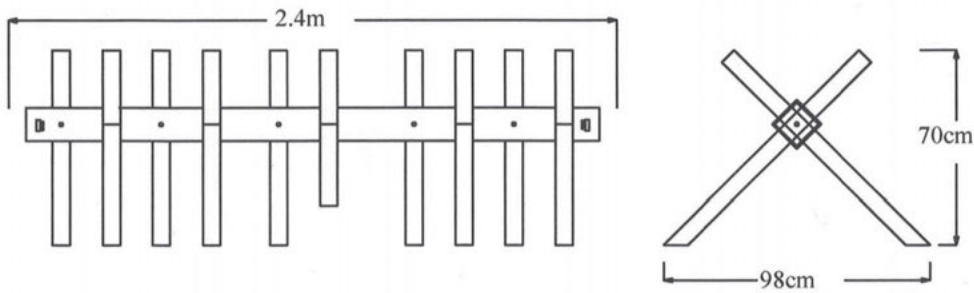
K2400hd: Spar boot (bottom), LLDPE, plastic w/pin.

Kit Number: rph16 (pn 14059) assembly, spar cap

Kit Number: rph 17 (pn 14059) assembly, spar boot

ROLOGARD K-2400hd

General Product Dimensions Ten Removable Spars



Base Unit Kit Number: hd200, Weight-154 kgs



Kit Number Prefix Designations:

sd-standard duty unit, hd-heavy duty unit, xd-interchangeable kits (sd+hd),
rp-repair and/or replacement parts

K-2400hd

Kit Number:

hd 200	Base unit
hd 208	Transport kit-axle, dual wheel castor assembly, handle
hd 220	Twin post kit; not available after March 1, 2019, see xd220
hd 228	Tang and hammer strap front/rear hitch, hardware
hd 229	50mm coupler and ball front/rear hitch, hardware
hd 230	75mm pintle ring and latchable hook front/rear, hardware
xd 114	Double side stop sign, post 1, snap pins 2
xd 116	Double side no walk Sign, post, snap pins
xd 118	Double side arrow sign, post, snap pins
xd 122	Solar powered light, post, snap pins
xd 123	Pin, 19mm, red handle
xd 124	Lashing Chain
xd 130	Screw anchor and clevis, 1.8 meter
xd 132	Screw anchor and clevis, 1.2 meter
xd 134	Screw anchor and clevis, .9 meter
xd 136	Screw anchor and clevis, .6 meter
xd 140	Anchoring cables, clevis', 4 meter
xd 142	Anchoring cables, clevis', 3 meter
xd 144	Anchoring cables, clevis', 2 meter
xd 150	Banner, mesh, Do Not Cross, posts and hardware

Kit Number:

xd 152	Banner, mesh, Customized Logo, posts and hardware, contact factory
xd 154	Banner, mesh, Randomly Placed, posts and hardware
xd 180	Storage box
xd 181	Storage box
xd 220	Twin post chain kit
rp h14	Spar with drop pin
rp h15	Spar, short (near axle)
rp h16	Spar cap (top) pn14058
rp h17	Spar boot (bottom) pn14059
rp x20	Slip hook
rp x28	Stay clear decal
rp h60	Center tube
rp h62	Center tube cable/clevis
rp h66	Twin post kit replacement chain
rp h69	Castor assembly
rp h71	Handle assembly
rp h74	Tire/wheel
rp h78	Hub, spindle, bearings, seal, nut, dust cap assembly
rp h79	Screw jack w/2 drop pins
rp x38	Clevis
rp x40	Snap pin
rp x44	Drop pin 6"-150mm
rp x45	Drop pin 9"-225mm
rp x46	Snap hook
wbl-A	Coverall
wbl-B	Windbreaker
wbl-C	Cap
wbl-D	Safety vest

Specification

This document may be used as a written specification for the Rologard K-2400hd mobile vehicle barrier, as a basis for Request for Quotation (RFQ's), Invitation to Bid (ITB) or other statements of interest. Please review www.rologard.com for specification updates, changes and revisions. (January 1, 2019)

Paragraph 1-The intent of this written specification is to describe a mobile vehicle security barrier system. The purpose of said system is to act as a deterrent to vehicles being used to impact and harm pedestrians and/or infrastructure such as buildings, bridges and ports. The general design of the unit is of fabricated metal components, movable and purposely positioned in or on sites determined to be likely targets and/or points of attack and impact from said vehicles.

Paragraph 2-With the assistance of two people, the barrier shall be of a design that, for storage purposes, shall incorporate a plurality (10) of spars-or legs, each individually removable from a horizontally displaced hollow tubular member without the use of tools. Made available as an option shall be a storage box specifically designed for the storage and transport of up to eight base unit barriers. With the assistance of two people said vehicle barrier, in its base unit configuration, shall be capable of being assembled, without use of tools, to an upright and operable condition and shall resemble, generally, an X type configuration. In its upright and operable condition the barrier base unit shall not exceed 2.4 meters in length and 98 centimeters in width and 70cm in height. Said horizontally displaced center member shall hold and carry an internally located flexible member-steel cable, with affixed loops on both cable ends with one cable end to include a screw type clevis. The base barrier unit shall include, at its front and rearmost points a method to attach a variety of hitching devices, to facilitate hooking one unit to another, to include a) a tang and hammerstrap arrangement, b) a coupler and ball arrangement, c) a pintle ring and locking hook arrangement. The base unit barrier shall include a permanent, riveted in place, serial number tag.

Paragraph 3- A variety of optional and attachable equipment shall be made available for the base barrier unit: A flat proof two tire assembly with a double wheel urethane castor, a pin on handle and a removable screw jack shall be available and identified as Optional Transport Kit; a pedestrian protection kit including two posts with link chain and hardware shall be available and identified as Optional Twin Post kit; a double sided stop sign with post and hardware shall be available and identified as Optional Stop Sign kit; a double sided no walk sign with post and hardware shall be available and identified as Optional No Walk kit; a double sided arrow directional sign with post and hardware shall be available and identified as Optional Arrow kit; a solar powered light with post and hardware shall be available and identified as Optional Light kit.

The aforementioned equipment specification describes a Rologard K-2400hd mobile vehicle security barrier and its' available optional equipment. RGC reserves the right to change, alter and /or amend its design specifications without notice or obligation.

www.rologard.com

ROLOGARD+LOGO WEARABLE GEAR



Rologard logo cover-all, embroidered emblems front and back. Color: orange. All sizes available, contact factory.

Kit Number: wbl- A
Kit Weight: N/A



Rologard logo windbreaker, embroidered logo front only. Color: black. All sizes available, contact factory.

Kit Number: wbl-B
Kit Weight: N/A



Rologard logo mesh hat, embroidered logo, adjustable size. Color: orange.

Kit Number: wbl-C
Kit Weight: N/A



Rologard logo reflective safety vest, printed logo, available in large and extra large. Color: orange.

Kit Number: wbl-D
Kit Weight: N/A

Kit Number Prefix Designations:

sd-standard duty unit, hd-heavy duty unit, xd-interchangeable kits (sd+hd), rp-repair and/or replacement parts.

ROLOGARD+LOGO WEARABLE GEAR

Kit Number:

wbl-A	Coverall
wbl-B	Windbreaker
wbl-C	Cap
wbl-D	Safety Vest



TERMS AND CONDITIONS

ROLOGARD GLOBAL COMPANY LLC

The following terms and conditions are applicable to the Rologard Mobile Vehicle Security Barrier product line.

All quoted pricing is in U.S. dollars. Price quotations may or may not include freight and handling charges, export or import or other excise taxes and/or tariffs.

***All inventory shall be paid for in full prior to its shipment from the factory(s).**

- Rologard Global retains the right to accept, in whole or in part, any or none of a customer's order.
- Rologard Global, solely, will determine whether or not shipments to a specific country, zone or territory are within the current U.S. Government regulations as determined by the U.S. Department of State and the U.S. Department of Defense.
- Orders that exceed a predetermined dollar amount, determined by Rologard Global, may require a deposit of a portion of or all of the order amount prior to Rologard Global accepting said order.
- Payment types include: Visa credit card, company check, wire transfer to a Rologard Global designated account. Rologard Global does not, at this time, accept Letters of Credit.
- Customer purchase orders must be provided on official customer letterhead and/or authorized form and to include purchase order number, contact person and phone number and acknowledgment of Terms and Conditions herein noted. See updates on the [rologard.com](http://www.rologard.com) website.
- Additional terms and conditions changes and alterations in credit terms may from time to time be made. *Review the Terms and Conditions section of www.rologard.com*



WARRANTY+PERFORMANCE ROLOGARD GLOBAL COMPANY LLC

This written warranty and performance notice, incorporated into Technical Bulletin#19 (sd,hd,A,english) shall represent the entire warranty + performance guarantee for Rologard Global, its subsidiaries and/or its products. No other warranty, expressed or implied, is applicable. Rologard Global, hereinafter referred to as the Company, makes no representation as to the effectiveness, performance, operability, merchantability or fitness for purpose of its products due to the vast variety of applications and locations. The Company hereby states that its products are manufactured under generally recognized, best practice conditions; that its products may or may not comply with some or any national or international crash standards for such devices. The company will accept no claim regarding product performance other than part replacement, fob factory, for component parts deemed, by the Company, to have been improperly manufactured and is limited to metal steel fabrications. Notwithstanding the prior statement, no warranty will be allowed, specifically, for wheel/tire assemblies and/or cables.

The vast majority of vehicle-as-weapon attacks are against concentrations of people... and not targeted at buildings or other infrastructure. To be truly effective, vehicle barriers must be highly mobile and capable of moving with the mass of transient pedestrian movements.

Don't roll the dice...



JUST DON'T!

Industries, Institutions, Installations served by Rologard Global Company:

Governmental Facilities, Military installations, Nuclear Facilities,
Stadiums+Arenas, Store+Retail Fronts, Water Treatment Centers, Parks,
Hike+Bike Trails, Airports, Corporate Campuses, Data+Electronic Banks,
Hospitals, Parade Routes, Sporting Events, Concerts, Temporary Access Denial,
Court+Legal Centers, Alleys and More...

www.rologard.com
info@rologard.com

© Copyright 2019, No Part of This Bulletin May Be Reproduced, Copied or Transmitted without Written Permission From Rologard Global Company.