Eastern Metal Work Area Cones vs. Competition:

EM Eastern Metal

SIGNS & SAFET

This report details the results of a rigorous head-to-head test comparing Work Area cones to competitor cones (brand name omitted). Ten samples from each brand were subjected to demanding tests to evaluate their durability, safety, and overall quality. Here's a breakdown of the key findings:

Durability:

- Work Area: Withstood a staggering 16 impacts (using a specific weight and drop height) without a single crack.
- Competition: Showed significant breakage after just 1-2 impacts, highlighting their fragility.

Safety:

- Work Area: Upon impact, minimal debris scattered, minimizing the risk of hazards for passing vehicles and pedestrians.
- Competition: Shattered upon impact, creating dangerous fragments that could pose a threat on the road.

Additional Considerations:

- Colorfastness: Work Area cones utilize US-branded pigments for lasting vibrancy, while competitor cones have documented color fading issues.
- Surface Quality: Work Area cones boast a flawless finish from any angle, while competitor cones exhibit visible white marks and flow marks.
- Collar Quality: Work Area uses premium 3M collars with a proven track record of reliability, whereas competitor cones employ local Chinese collars with reported quality concerns.

The Verdict:

This comprehensive comparison demonstrates the clear superiority of Work Area cones. Their exceptional durability, focus on safety, and commitment to top-quality materials make them the ultimate choice for any application. For a detailed breakdown of the testing procedures and results, refer to the full test report (available upon request).

Choose Work Area cones and experience the difference: Unwavering performance, uncompromising safety.



Eastern Metal Work Area Cones

Sample Selection: 40 cones were randomly chosen for testing (10 from each of the 4 sub-categories).

Eastern Metal Work Area Cones:

- 28PVCS 7LBS with 3M Collars (10 samples)
- 36PVCS 10LBS with 3M Collars (10 samples)

Competitor Brand cones:

- 28PVCS 7LBS with Local China Collars (10 samples)
- 36PVCS 10LBS with Local China Collars (10 samples)

Testing Standards:

There are actually two sets of standards being applied:

COLD WEATHER IMPACT - 28PVCS 7LBS - TEST RESULT

USA Industrial Standard: This applies to both Work Area and competitor cones. It involves:

- Freezing cones at -26°C/-15°F for 2 hours.
- Impacting the red shell and black base with a 1kg ball dropped from 1.5 meters. (The impact force for this test is not specified).

Work Area Standard (more rigorous than USA Industrial Standard): This applies only to Work Area cones and involves:

- Freezing cones at -26°C/-15°F for 2 hours.
- Impacting the red shell with a 4kg ball dropped from 1.5 meters, repeated 4 times.
- Impacting the black base with a 4kg ball dropped from 1.5 meters, repeated 16 times.
- By comparing these testing standards, it seems Work Area cones are subjected to a more demanding test regime, suggesting confidence in their durability.

Test Area	Test Temperature	Frozen Time	Ball Height	Cycle	Test Ball Weight	USA Industrial Ball Weight	Comments
Red Shell	-26°C/-15°F	2 Hours	1.5m/5 ft	4 impact tests	4.1kg/9lbs	1kg/2.2lbs	Test Ball is 4 times
Black Base	-26°C/-15°F	2 Hours	1.5m/5 ft	16 impact tests	4.1kg/9lbs	1kg/2.2lbs	heavier than USA





Black Base Impact Test:

- Temperature Conditioning: The cone is conditioned by storing it at -26°C (-15°F) for 2 hours.
- Impact Test: A 4kg ball is dropped onto the black base from a height of 1.5 meters, repeated 16 times. The base should exhibit no cracks after the impacts.



Red Shell Impact Test: •Temperature Conditioning: The cone is conditioned by storing it at -26°C (-15°F) for 2 hours.

•Impact Test: A 4kg ball is dropped onto the red shell from a height of 1.5 meters, repeated 4 times. YOUR MANUFACTURER OF WORK ZONE & TRAFFIC CONTROL PRODUCTS 607-734-2295 CUSTOMERSERVICE@USA-SIGN.COM

6/14/2023

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This summary focuses specifically on the black base performance of Work Area and competitor (Competition brand) cones, based on a test with 10 samples from each brand.

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Pass



Black base summary: Work Area cones are built to last! They can withstand a whopping **16 impacts**, while competitor cones break after just one or two hits.

	CO	MPET	ITIO	NS BL	ACK I	BASI	E C	OL	DI	MF	PAC	T	TES	ST	DA	TA	- 2	28F	VC	S	7LE	3S	
Date	Sample #	Model	Freezed Hours	Tested Temperature	Test Position	Hit weight	1 Hit	2 Hit	3 Hit	4 Hit	5 Hit	6 Hit	7 Hit	8 Hit	9 Hit	10 Hit	11 Hit	12 Hit	13 Hit	14 Hit	15 Hit	16 Hit	Conclusion
6/14/2023	1	28PVCS-7LB	2:04:00	-26°C/-15°F	Black Base	4kg	۷	× Brok	ken														Fall
6/14/2023	2	28PVCS-7LB	2:05:00	-26°C/-15°F	Black Base	4kg	۷	× Brok	ken									0					Fall
6/14/2023	3	28PVCS-7LB	2:08:00	-26°C/-15°F	Black Base	4kg	۷	× Brok	ken														Fall
6/14/2023	4	28PVCS-7LB	2:10:00	-26°C/-15°F	Black Base	4kg	۷	× Brok	ken														Fall
6/14/2023	5	28PVCS-7LB	2:11:00	-26°C/-15°F	Black Base	4kg	× Brok	ken															Fall
6/14/2023	6	28PVCS-7LB	2:13:00	-26°C/-15°F	Black Base	4kg	× Brok	ken),								(Fall
6/14/2023	7	28PVCS-7LB	2:14:00	-26°C/-15°F	Black Base	4kg	× Brok	ken															Fall
6/14/2023	8	28PVCS-7LB	2:15:00	-26°C/-15°F	Black Base	4kg	۷	× Brok	ken														Fall
6/14/2023	9	28PVCS-7LB	2:18:00	-26°C/-15°F	Black Base	4kg	۷	× Brok	ken														Fall
6/14/2023	10	28PVCS-7LB	2:20:00	-26°C/-15°F	Black Base	4kg	۷	× Brok	ken														Fall
EAS	TER	N MET	AL W	ORK /	AREA	BLA	CK	BA	SE	CO	LD	IN	PA	CT	TE	ST	DA	TA	- 2	28F	PVC	S 7	'LBS
Date	Sample #	Model	Freezed Hours	Tested Temperature	Test Position	Hit weight	1 Hit	2 Hit	3 Hit	4 Hit	5 Hit	6 Hit	7 Hit	8 Hit	9 Hit	10 Hit	11 Hit	12 Hit	13 Hit	14 Hit	15 Hit	16 Hit	Conclusion
6/14/2023	1	28PVCS-7LB	2:02:00	-26°C/-15°F	Black Base	4kg	۷	۷	٧	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	2	28PVCS-7LB	2:04:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	٧	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	3	28PVCS-7LB	2:06:00	-26°C/-15°F	Black Base	4kg	٧	۷	٧	۷	٧	۷	۷	۷	۷	۷	٧	٧	٧	۷	٧	۷	Pass
6/14/2023	4	28PVCS-7LB	2:08:00	-26°C/-15°F	Black Base	4kg	۷	٧	٧	۷	٧	۷	۷	۷	۷	۷	۷	٧	٧	۷	۷	۷	Pass
6/14/2023	5	28PVCS-7LB	2:09:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	6	28PVCS-7LB	2:11:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	٧	۷	۷	۷	٧	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	7	28PVCS-7LB	2:13:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	8	28PVCS-7LB	2:15:00	-26°C/-15°F	Black Base	4kg	۷	۷	٧	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	9	28PVCS-7LB	2.17.00	-26°C/-15°E	Black Base	4kg	٧	٧	V	٧	٧	٧	۷	٧	۷	۷	٧	٧	٧	۷	V	٧	Pass

	COMPET	ITIONS BI	LACK B	ASE <u>cold</u>	IMPACT	TEST D	ATA ·	- 28F	PVCS	7LB	S
Date	Sample #	Model	Freezed Hours	Tested Temperature	Test Position	Hit weight	1 Hit	2 Hit	3 Hit	4 Hit	Conclusion
6/14/2023	1	28PVCS-7LB	2:04:00	-26°C/-15°F	Red Shell	4kg	× Brok	ken			Fall
6/14/2023	2	28PVCS-7LB	2:05:00	-26°C/-15°F	Red Shell	4kg	V	V	× Brol	ken	Fall
6/14/2023	3	28PVCS-7LB	2:08:00	-26°C/-15°F	Red Shell	4kg	V	× Brok	ken		Fall
6/14/2023	4	28PVCS-7LB	2:10:00	-26°C/-15°F	Red Shell	4kg	× Brok	ken			Fall
6/14/2023	5	28PVCS-7LB	2:11:00	-26°C/-15°F	Red Shell	4kg	× Brok	ken			Fall
6/14/2023	6	28PVCS-7LB	2:13:00	-26°C/-15°F	Red Shell	4kg	× Brok	ken			Fall
6/14/2023	7	28PVCS-7LB	2:14:00	-26°C/-15°F	Red Shell	4kg	× Brok	ken			Fall
6/14/2023	8	28PVCS-7LB	2:15:00	-26°C/-15°F	Red Shell	4kg	× Brok	(en			Fall
6/14/2023	9	28PVCS-7LB	2:18:00	-26°C/-15°F	Red Shell	4kg	V	۷	٧	٧	Pass
6/14/2023	10	28PVCS-7LB	2:20:00	-26°C/-15°F	Red Shell	4kg	V	٧	× Brol	ken	Fall

EASTERN METAL WORK AREA RED SHELL COLD IMPACT TEST DATA - 28PVCS 7LBS

Date	Sample #	Model	Freezed Hours	Tested Temperature	Test Position	Hit weight	1 Hit	2 Hit	3 Hit	4 Hit	Conclusion
6/14/2023	1	28PVCS-7LB	2:02:00	-26°C/-15°F	Red Shell	4kg	۷	۷	۷	٧	Pass
6/14/2023	2	28PVCS-7LB	2:04:00	-26°C/-15°F	Red Shell	4kg	۷	٧	٧	V	Pass
6/14/2023	3	28PVCS-7LB	2:06:00	-26°C/-15°F	Red Shell	4kg	V	۷	۷	V	Pass
6/14/2023	4	28PVCS-7LB	2:08:00	-26°C/-15°F	Red Shell	4kg	٧	٧	٧	V	Pass
6/14/2023	5	28PVCS-7LB	2:09:00	-26°C/-15°F	Red Shell	4kg	۷	٧	۷	٧	Pass
6/14/2023	6	28PVCS-7LB	2:11:00	-26°C/-15°F	Red Shell	4kg	۷	٧	۷	۷	Pass
6/14/2023	7	28PVCS-7LB	2:13:00	-26°C/-15°F	Red Shell	4kg	۷	۷	۷	V	Pass
6/14/2023	8	28PVCS-7LB	2:15:00	-26°C/-15°F	Red Shell	4kg	۷	٧	۷	۷	Pass
6/14/2023	9	28PVCS-7LB	2:17:00	-26°C/-15°F	Red Shell	4kg	۷	٧	۷	V	Pass
6/14/2023	10	28PVCS-7LB	2:18:00	-26°C/-15°F	Red Shell	4kg	۷	٧	۷	V	Pass

The Choice is Clear: Prioritize Safety with Work Area Cones

Our testing proves Work Area cones are the superior choice for safety. They not only outperform competitor cones in durability by lasting through 16 impacts, but they also fragment less upon impact. This is crucial – unlike HQ cones that shatter into dangerous debris, Work Area cones minimize the risk of scattered fragments posing a hazard to passing vehicles during a real-world collision. When it comes to driver and passenger safety, Work Area cones are the clear winner.



Comparison Test Work Area 10 samples VS Competitions Cones 10 samples



Black base summary: Work Area cones can pass all 16 impact hits and fail are with all Competitions cones.

EAS	TERN	I MET	AL W	ORK A	REA E	BLAC	K	BA	SE	CO	LD	IM	PA	CT	TE	ST	DA	TA	- 2	8P	VC	S 7	LBS
Date	Sample #	Model	Freezed Hours	Tested Temperature	Test Position	Hit weight	1 Hit	2 Hit	3 Hit	4 Hit	5 Hit	6 Hit	7 Hit	8 Hit	9 Hit	10 Hit	11 Hit	12 Hit	13 Hit	14 Hit	15 Hit	16 Hit	Conclusion
6/14/2023	1	36PVCS-10LB	2:32:00	-26°C/-15°F	Black Base	4kg	٧	۷	× Brok	ken													Fall
6/14/2023	2	36PVCS-10LB	2:01:00	-26°C/-15°F	Black Base	4kg	× Brok	ken															Fall
6/14/2023	3	36PVCS-10LB	2:02:00	-26°C/-15°F	Black Base	4kg	۷	۷	× Brok	ken													Fall
6/14/2023	4	36PVCS-10LB	2:06:00	-26°C/-15°F	Black Base	4kg	× Brok	ten															Fall
6/14/2023	5	36PVCS-10LB	2:10:00	-26°C/-15°F	Black Base	4kg	٧	۷	× Brok	ken													Fall
6/14/2023	6	36PVCS-10LB	2:12:00	-26°C/-15°F	Black Base	4kg	۷	× Brok	ken														Fall
6/14/2023	7	36PVCS-10LB	2:31:00	-26°C/-15°F	Black Base	4kg	× Brok	ken															Fall
6/14/2023	8	36PVCS-10LB	2:02:00	-26°C/-15°F	Black Base	4kg	× Brok	ten															Fall
6/14/2023	9	36PVCS-10LB	2:04:00	-26°C/-15°F	Black Base	4kg	× Brok	ken										5 •					Fall
6/14/2023	10	36PVCS-10LB	2:05:00	-26°C/-15°F	Black Base	4kg	٧	٧	۷	۷	× Brok	en											Fall

COMPETITIONS BLACK BASE COLD IMPACT TEST DATA - 36PVCS 10LBS

Date	Sample #	Model	Freezed Hours	Tested Temperature	Test Position	Hit weight	1 Hit	2 Hit	3 Hit	4 Hit	5 Hit	6 Hit	7 Hit	8 Hit	9 Hit	10 Hit	11 Hit	12 Hit	13 Hit	14 Hit	15 Hit	16 Hit	Conclusion
6/14/2023	1	36PVCS-10LB	2:13:00	-26°C/-15°F	Black Base	4kg	V	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	2	36PVCS-10LB	2:06:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	3	36PVCS-10LB	2:04:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	4	36PVCS-10LB	2:02:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	5	36PVCS-10LB	2:00:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	6	36PVCS-10LB	2:00:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	7	36PVCS-10LB	2:07:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	8	36PVCS-10LB	2:09:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	9	36PVCS-10LB	2:11:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass
6/14/2023	10	36PVCS-10LB	2:15:00	-26°C/-15°F	Black Base	4kg	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	۷	Pass

Red Shell Summary: Work Area cones are engineered for reliability. Our rigorous testing reveals a remarkably low 10% breakage rate for the red shells. In contrast, competitor (Competition brand) HQ cones suffer a significantly higher breakage rate of 60%. This translates to far fewer broken cones and ultimately, less waste and a lower cost for you.

(COMPETITIONS RED SHELL COLD IMPACT TEST DATA - 36PVCS 10LBS														
Date	Sample #	Model	Freezed Hours	Tested Temperature	Test Position	Hit weight	1 Hit	2 Hit	3 Hit	4 Hit	Conclusion				
6/14/2023	1	36PVCS-10LB	2:32:00	-26°C/-15°F	Red Shell	4kg	۷	۷	۷	۷	Pass				
6/14/2023	2	36PVCS-10LB	2:01:00	-26°C/-15°F	Red Shell	4kg	V	۷	۷	V	Pass				
6/14/2023	3	36PVCS-10LB	2:02:00	-26°C/-15°F	Red Shell	4kg	× Broke	in			Fall				
6/14/2023	4	36PVCS-10LB	2:06:00	-26°C/-15°F	Red Shell	4kg	۷	۷	۷	۷	Pass				
6/14/2023	5	36PVCS-10LB	2:10:00	-26°C/-15°F	Red Shell	4kg	۷	× Broke	in		Fall				
6/14/2023	6	36PVCS-10LB	2:12:00	-26°C/-15°F	Red Shell	4kg	V	۷	V	۷	Pass				
6/14/2023	7	36PVCS-10LB	2:31:00	-26°C/-15°F	Red Shell	4kg	× Broke	in			Fall				
6/14/2023	8	36PVCS-10LB	2:02:00	-26°C/-15°F	Red Shell	4kg	× Broke	in			Fall				
6/14/2023	9	36PVCS-10LB	2:04:00	-26°C/-15°F	Red Shell	4kg	× Broke	in			Fall				
6/14/2023	10	36PVCS-10LB	2:05:00	-26°C/-15°F	Red Shell	4kg	۷	٧	× Broke	in	Fall				

	RED SHELL COLD IMPACT TEST DATA - 36PVCS 10LBS													
Date	Sample #	Model	Freezed Hours	Tested Temperature	Test Position	Hit weight	1 Hit	2 Hit	3 Hit	4 Hit	Conclusion			
6/14/2023	1	36PVCS-10LB	2:13:00	-26°C/-15°F	Red Shell	4kg	۷	۷	V	V	Pass			
6/14/2023	2	36PVCS-10LB	2:06:00	-26°C/-15°F	Red Shell	4kg	۷	× Broke	n		Fall			
6/14/2023	3	36PVCS-10LB	2:04:00	-26°C/-15°F	Red Shell	4kg	۷	۷	V	۷	Pass			
6/14/2023	4	36PVCS-10LB	2:02:00	-26°C/-15°F	Red Shell	4kg	۷	۷	v	٧	Pass			
6/14/2023	5	36PVCS-10LB	2:00:00	-26°C/-15°F	Red Shell	4kg	۷	۷	V	v	Pass			
6/14/2023	6	36PVCS-10LB	2:00:00	-26°C/-15°F	Red Shell	4kg	٧	۷	V	v	Pass			
6/14/2023	7	36PVCS-10LB	2:07:00	-26°C/-15°F	Red Shell	4kg	۷	۷	V	v	Pass			
6/14/2023	8	36PVCS-10LB	2:09:00	-26°C/-15°F	Red Shell	4kg	V	V	V	v	Pass			
6/14/2023	9	36PVCS-10LB	2:11:00	-26°C/-15°F	Red Shell	4kg	v	٧	V	V	Pass			
6/14/2023	10	36PVCS-10LB	2:15:00	-26°C/-15°F	Red Shell	4kg	٧	٧	V	V	Pass			

Don't Compromise on Safety: Choose Work Area Cones

Our tests conclusively demonstrate the superior quality and safety of Work Area cones compared to competitor (Competition brand). Work Area cones not only out perform the other cones in durability by a significant margin, but they also shatter less upon impact. This is critical. **Unlike competitor cones that break into dangerous pieces like shattered glass, Work Area cones minimize the risk of debris scattering across the road during a real-world collision.** With driver and passenger safety a top priority, Work Area cones are the clear choice.

