

## Permanent Impact Attenuator Attributes

ID #	Product Name	Manufacturer	ODOT Types	Test Level or Speed	Re-Directive or Partial.	Gating or not	Designed for Obstacle Widths <sup>2</sup> of:	Length of Attenuator <sup>1</sup>	One Sided Hit (Shoulder)	Two Sided (Gore)	Two Sided Reverse Direction (Median)	Low <sup>3</sup> / Regular Maintenance
2921	EASI-CELL	ENERGY ABSORPTION		TL-1	Partial	Gating	51"	102"	Yes	Yes	Yes	Regular Maintenance
3154	2005 SHORTRACC (TL-2)	TRINITY INDUSTRIES	C	TL-2	Yes	Non-Gating	24" & 30"	14'	Yes	Yes	Yes	Regular Maintenance
3155	2005 WIDETRACC (TL-2)	TRINITY INDUSTRIES	C	TL-2	Yes	Non-Gating	2' 6"	Variable	Yes	Yes	Yes	Regular Maintenance
3436	QUAD-GUARD (TL-2)	ENERGY ABSORPTION	G & H	TL-2	Yes	Non-Gating	24" - 90"	13' 1"	Yes	Yes	Yes	Low Maintenance
3872	QUAD-GUARD II	ENERGY ABSORPTION	G & H	TL-2	Yes	Non Gating	24" - 90"	8' 8"	Yes	Yes	Yes	Low Maintenance
2413	QUAD-GUARD ELITE - 7 BAY	ENERGY ABSORPTION	G & H	TL-2	Yes	Non Gating	24-90"	Variable (23' 9" + transition)	Yes	Yes	Yes	Low Maintenance
4372	QUEST 70 (TL-2)	ENERGY ABSORPTION	C & D	TL-2	Yes	Non Gating	24" - 36"	21' 2"	Yes	Yes	Yes	Regular Maintenance
3437	REACT 350 WIDE (TL-2)	ENERGY ABSORPTION	H	TL-2	Yes	Non Gating	60", 90"	18' 10"	Yes	Yes	Yes	Low Maintenance
3438	REACT 350 NARROW (TL-2)	ENERGY ABSORPTION	G	TL-2	Yes	Non Gating	36"	15' 2 3/4"	Yes	Yes	Yes	Low Maintenance
3110	SCI70GM	WORK AREA PROTECTION	G & H	TL-2	Yes	Non Gating	24" - 120"	Variable (13' 6" + transition)	Yes	Yes	Yes	Low Maintenance
2844	SHORTTRACC	TRINITY INDUSTRIES	C	TL-2	Yes	Non Gating	24" & 30"	14'	Yes	Yes	Yes	Regular Maintenance
2961	UNIVERSAL TAU-II	BARRIER SYSTEMS	C & D	TL-2	Yes	Non Gating	up to 102"	Variable (9' - 22' + transition)	Yes	Yes	Yes	Regular Maintenance
3153	2005 TRACC (TL-3)	TRINITY INDUSTRIES	E	TL-3	Yes	Non Gating	24" & 30"	21'	Yes	Yes	Yes	Regular Maintenance
3155	2005 WIDETRACC (TL-3)	TRINITY INDUSTRIES	F	TL-3	Yes	Non-Gating	Variable	Variable	Yes	Yes	Yes	Regular Maintenance
2711	BEAT SSCC	ROAD SYSTEMS, INC.	A	TL-3	Partial	Gating	NA (Single Sided)	28'	Yes	No	No	Regular Maintenance
880	BRAKEMASTER 350	ENERGY ABSORPTION	B	TL-3	Partial	Gating	G/R Transition	31' 8"	Yes	Yes	Yes	Regular Maintenance
291	CAT-350 CRASH CUSHION	TRINITY INDUSTRIES	B	TL-3	Partial	Gating	G/R & Barrier	31.2' w/ Tail	Yes	Yes	Yes	Regular Maintenance
3649	HEART	TRINITY INDUSTRIES	J <sup>5</sup>	TL-3	Yes	Non Gating	24"	26'	Yes	Yes	Yes	Low Maintenance <sup>5</sup>
1572	QUAD-GUARD	ENERGY ABSORPTION	J & K	TL-3	Yes	Non Gating	24" - 120"	22' 1"	Yes	Yes	Yes	Low Maintenance
3872	QUAD-GUARD II	ENERGY ABSORPTION	J & K	TL-3	Yes	Non Gating	24" - 120"	17' 8"	Yes	Yes	Yes	Low Maintenance
2413	QUAD-GUARD ELITE - 11 BAY	ENERGY ABSORPTION	J & K	TL-3	Yes	Non Gating	24" - 90"	Variable (35' + transition)	Yes	Yes	Yes	Low Maintenance
4414	QUAD-GUARD ELITE - 8 BAY	ENERGY ABSORPTION	J & K	TL-3	Yes	Non Gating	G/R & Barrier	26' 7"	Yes	Yes	Yes	Low Maintenance
1906	QUAD-TREND 350	ENERGY ABSORPTION	A	TL-3	Partial	Gating	NA (Single Sided)	20'	Yes	No	No	Regular Maintenance
3138	QUEST 350	ENERGY ABSORPTION	E	TL-3	Yes	Non Gating	24"	22' 2"	Yes	Yes	Yes	Regular Maintenance
2587	REACT 350 - WIDE	ENERGY ABSORPTION	K	TL-3	Yes	Non Gating	60", 96" & 120"	33' 10"	Yes	Yes	Yes	Low Maintenance
1364	REACT 350 (NARROW)	ENERGY ABSORPTION	J	TL-3	Yes	Non Gating	36"	30' 8"	Yes	Yes	Yes	Low Maintenance
2907	SCI100GM	WORK AREA PROTECTION	J & K	TL-3	Yes	Non-Gating	24" - 120"	Variable (21' 6" + transition)	Yes	Yes	Yes	Low Maintenance
1902	TRACC	TRINITY INDUSTRIES	E	TL-3	Yes	Non Gating	24"	Variable (21' + transition)	Yes	Yes	Yes	Regular Maintenance
2961	UNIVERSAL TAU-II	BARRIER SYSTEMS	E & F	TL-3	Yes	Non Gating	up to 102"	25'	Yes	Yes	Yes	Regular Maintenance
2759	WIDETRACC	TRINITY INDUSTRIES	E & F	TL-3	Yes	Non Gating	Variable	Variable (21' + transition)	Yes	Yes	Yes	Regular Maintenance
3156	2005 FASTRACC	TRINITY INDUSTRIES	Type M <sup>4</sup>	70 mph	Yes	Non Gating	24" & 30"	26'	Yes	Yes	Yes	Regular Maintenance
2570	QUAD-GUARD HS (HIGH SPEED)	ENERGY ABSORPTION	Type L <sup>4</sup>	70 mph	Yes	Non Gating	24"	30' 7" to 31' 3"	Yes	Yes	Yes	Low Maintenance
3555	QUEST 115	ENERGY ABSORPTION	Type M <sup>4</sup>	70 mph	Yes	Non Gating	24, 30, 36"	33' 3"	Yes	Yes	Yes	Regular Maintenance
2961	UNIVERSAL TAU-II	BARRIER SYSTEMS	Type M <sup>4</sup>	70 mph	Yes	Non Gating	up to 102"	29' 6"	Yes	Yes	Yes	Regular Maintenance

## Notes:

- Lengths of Impact Attenuators as listed above only includes the energy-absorbing part.
- The design width for obstacles do not take into account additional width the Impact Attenuator may add.
- For the safety of our maintenance crews ODOT uses Low Maintenance devices when total daily traffic count is 25K or more, or if one or more hits are expected in one year; check the plans.
- Types L<sup>4</sup> and M<sup>4</sup> are allowed on projects by Special Provision only.
- Due to side impact considerations this unit will not be allowed in gores where the ADT is 25K or higher.
- Low Maintenance units may be substituted for Regular Maintenance units providing the remaining specified attributes are met.