

**ASSOCIATED MODEL
RAILROAD ENGINEERS OF
COSHOCOTON, INC**

STANDARDS

August 2026

All previous editions are obsolete

ASSOCIATED MODEL RAILROAD ENGINEERS OF COSHOCOTON, INC

STANDARDS

ROLLING STOCK

General Instructions

1. Rolling Stock is defined as any equipment to be placed upon the layout.
2. All rolling stock must be approved by a member of the standards committee prior to its being placed on the layout.
3. Any rolling stock which has been bad ordered must be reapproved by a member of the standards committee prior to being placed back on the layout.
4. No club member is to approve his/her own equipment.

STANDARDS (REQUIRED)

Equipment Numbers – Equipment in your physical possession

1. All rolling stock must be registered in the club's computer register. For the switch list, no two cars can have the same number for the same reporting marks. For example, it would be permissible to have a PRR box car with the number 1234 and a B&O gondola with the number 1234. However, it would not be permissible to have a PRR box car with the number 5678 and a PRR gondola with the number 5678.
2. If more than one member has a duplicate rolling stock number in the club register, the secondary number should be denoted by a color other than black.
3. The date the car is requested to be placed in the club equipment register is how the determination is made as to who has rights to that number.
4. If the rolling stock has end numbers, they must match the reporting marks and numbers on the sides.
5. Place your initials on the bottom of your cars

Wheels

1. All wheels must have RP 25 flanges or smaller.
2. Wheels must be centered upon their axle.
3. Wheels must be in gauge completely around the wheel. Gauge is checked with the NMRA gauge. (A Mark II gauge is required).

4. Wheels with broken flanges will not be permitted on the layout.
5. Any blackening agent should be removed from wheel treads.

Trucks – Non Locomotive

1. The trucks must swivel freely.
2. The rolling stock must not lean or rock excessively when rolling down the track.
(One truck tighter to follow the car and one truck looser to follow the rail is suggested.)
3. Truck screws must not be so loose as to be able to vibrate and fall out.
4. All car trucks must be mounted with screws except cars which originally had truck pins that have proven to remain tight.

Weight

1. Rolling stock will be weighted according to the following table (From the NMRA recommended practice of one ounce per car plus one-half ounce per inch of length.) The length is determined by the outside distance from one end of the car to the other end of the car (not over the coupler pulling surface.)

<u>Weight Table</u>			
Length in Scale <u>Feet</u>	Weight in <u>Grams</u>	Length in Scale <u>Feet</u>	Weight in <u>Grams</u>
20	67.5		
21	69.4	41	108.5
22	71.4	42	110.5
23	73.3	43	112.4
24	75.3	44	114.4
25	77.2	45	116.3
26	79.2	46	118.3
27	81.1	47	120.2
28	83.1	48	122.2
29	85.1	49	124.2
30	87.0	50	126.1
31	89.0	51	128.1
32	90.9	52	130.0
33	92.9	53	132.0
34	94.8	54	133.9
35	96.8	55	135.9
36	98.7	56	137.8
37	100.7	57	139.8
38	102.6	58	141.8
39	104.6	59	143.7
40	106.6	60 or more	145.7

Each car may weigh up to 14.2 grams more than the weight stated in the above chart.

2. Each section of articulated rolling stock must meet the weight requirements above. For articulated double stack cars, each platform should be weighted to the forty-foot car standard. Each set of containers for stack cars should weigh 53 grams, placed in the bottom container. If multiple containers are to be in a platform, connect the containers together with a white glue such as Elmer's Glue-All.
3. Rolling stock that is equipped with factory supplied weight and is still above the maximum allowable weight for its length will be exempted from the weight limit.
4. Any additional weight added will be securely attached to prevent detachment during operation.
5. Any loads added must be securely attached to the rolling stock.
6. Weights which will be visible must be painted the color of the rolling stock to make them as inconspicuous as possible.

Rollability

1. Non powered rolling stock must be able to roll down a 3% grade without being pushed. Rolling stock with electrical pick-up wipers on the axles is exempt from this standard.

Couplers

1. All rolling stock will be equipped with Kadee (preferred) couplers or Kadee style all metal (no plastic) couplers (Rolling stock that on the prototype were connected by drawbars may also be connected by drawbars on the model.) If a car has an End of Train (EOT) device, the Kadee coupler requirement will be waived for the coupler attached to an EOT device.
2. Couplers must be body mounted. (Couplers that were not body mounted on the prototype may be mounted in a corresponding manner on the model.)
3. The coupler height must match the Kadee height gauge located on/near the standards board. The center point of the coupler should be 25/64" (+/- .017") at the centerline.
4. All couplers must have trip pins that are 1/32" above the rail head measured with a Kadee height gauge.
5. The trip pin must move sideways to open the knuckle of the coupler when the coupler moves across a magnetic uncoupling ramp.
6. The entire coupler must have some sideways movement when the coupler moves across a magnetic uncoupling ramp to allow delayed action uncoupling.
7. The Kadee centering spring for the number 5 style couplers must be installed between the top of the coupler pocket and the shank of the coupler.
8. Couplers must have knuckle springs in them at all times.
9. The coupler shank length must allow adjacent trip pin clearance.

DCC Engines

1. All locomotives that are DCC equipped must have black trip pins with a 1/16" silver mark on end of trip pins.

Weathering

1. Visible portions of axles must be black or rust in color.
2. Wheel faces (not treads) must be dark or rust. (Shine should be removed from wheel faces)
3. Brass equipment is exempt from weathering standards.

Detection - TBD

Appearance

1. For all locomotives, handrails (if they were on the prototype) are required on the model. Locomotive handrails must be painted.

SUGGESTIONS (NOT REQUIRED)

1. Underbody weights (those not normally seen) should be painted.
2. Freight cars should have end numbers.
3. Glass should be in all windows.
(Examples: cabooses, passenger cars, locomotives, and structures)
4. Caboose or rear end cars should have marker lights or flags.
5. Locomotive number boards should have the numbers installed.
6. Locomotives should have operating headlights.
7. Brake wheels should be painted or coated to remove the plastic shine.
8. Truck side frames should be painted or coated to remove the plastic shine.
9. For better operation, metal wheels are preferred.

FAIR OPERATIONS

The following shall be observed.

1. Double Track Main – A maximum of two (2) Eastbound and two (2) Westbound trains at any one time.
2. All trains should be operated at moderate speed when in motion.
3. All trains shall have a caboose or operating End of Train device.

LOCOMOTIVE TESTING ON THE MAIN LINE

1. Locomotives (light power = no rolling stock attached) may be tested with a maximum of one (1) lap around the main line. The equipment is to be removed immediately after testing.