

# The Railroad Model and Historical Society of Southeast Ohio

## “BendTrack” N Scale Module Standards as of April 20, 2022

### Benchwork

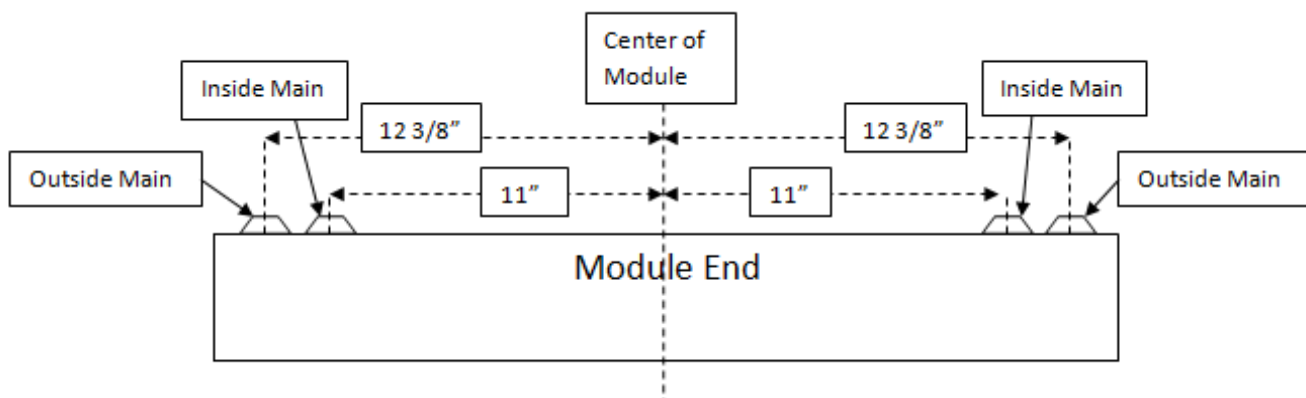
The benchwork of each module shall be constructed to the following minimum specifications:

- All modules shall be constructed to the standard layout height of 31”
- All modules shall be capable of being leveled and raised/lowered in order to accommodate for uneven/unlevel surfaces.

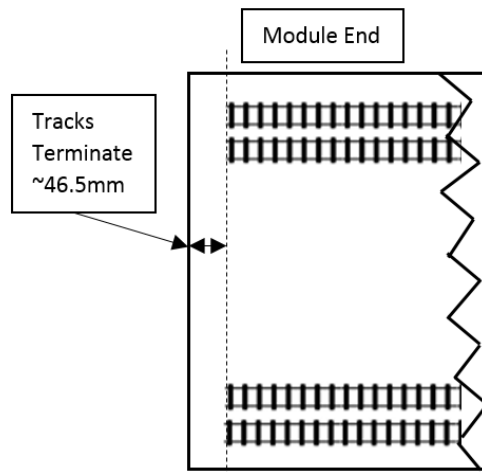
### Trackwork

The trackwork on each module shall be constructed to the following minimum specifications:

- All mainline track is to be Kato UniTrack including straights, curves, and switches.
  - Non-mainline tracks shall contain no minimum specifications.
  - Certain Tomix track pieces may be used on the mainlines. Must be group approved for use.
- All mainline switches are to be Kato UniTrack #4 and #6 switches.
  - If the diverging route of the switch will be used for normal mainline operation, Kato UniTrack #6 switches must be used.
  - Certain Tomix track pieces may be used on the mainlines. Must be group approved for use.
- All mainline curves shall be no smaller than 348mm (~13 ¾”) radius.
- The inside mainline shall be 282mm (~11”) from the center of the module.
- The outside mainline shall be 315mm (~12 ⅜”) from the center of the module.



- Must use Kato 20-043 track pieces (or similar) as the first fixed track piece on module ends. Kato UniTrack Expansion tracks (part number 20-050) shall be used as joiner tracks between modules. Every module owner shall provide half the necessary joiner tracks required to connect to other modules.



- At no point shall one mainline obstruct the Right of Way of the other mainline (ie. Diamond) that would cause either of the two standard BendTrack mainlines to not have a clear route.
  - Diamonds can be used on alternate routes, but there must be two standard BendTrack mainline routes for continuous running.
- No grades are to be allowed on the BendTrack double mainlines.

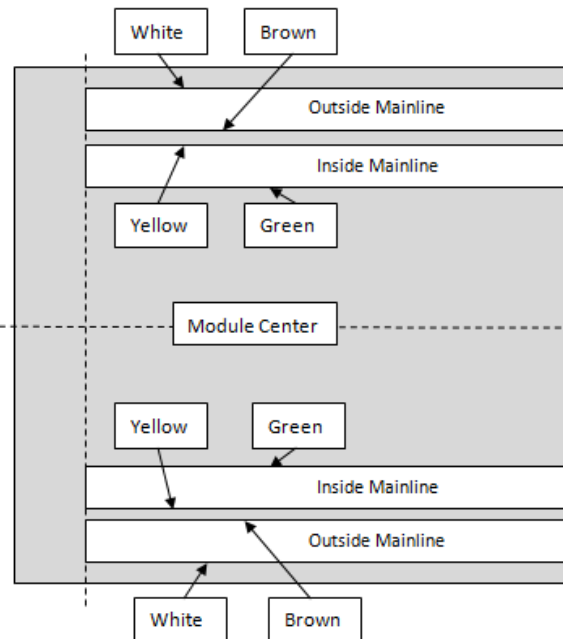
## Scenery

- No ballast will be added to the BendTrack double mainlines.
- Mainlines should be clear of any low hanging trees/ buildings.
- No restrictions on painting rails, ties or road bed, but rail heads must be clean for adequate electrical pick up.

## Electrical

The electrical wiring of each module shall be constructed to the following minimum specifications:

- The buss line for each mainline shall consist of 16awg (min.) wire utilizing the following colors:
  - Outside Mainline, Outside Rail: White
  - Outside Mainline, Inside Rail: Brown
  - Inside Mainline, Outside Rail: Yellow
  - Inside Mainline, Inside Rail: Green



- The feeder lines shall consist of 20awg (min.) wire utilizing the appropriate colors per the above listing.
- The buss line for the accessory wiring shall consist of 16awg (min.) wire. The wire colors shall be red and brown.
- The mainline wiring harness shall consist of a flat, four (4) wire trailer plug. The wire colors shall match those of the mainline buss wires and shall be 16awg (min.).
- The accessory wiring harness shall consist of a two (2) wire plug similar to that of a trailer plug. The wire colors shall match those of the accessory wires and shall be 16awg (min.).
- The end of each module shall have a terminal strip mounted to the inside of each endplate. The top of each terminal strip shall contain the buss wires and the feeder wires. The bottom of each terminal strip shall contain the wiring harness used to connect to additional modules.
- All wires shall utilize appropriately sized spade terminals to attach to the terminal strips.
- Modules shall have two (2) sets of feeder wires for every four (4) feet of length or portion thereof (min.).
- Feeder wires must be placed on each side of every switch.
  - It shall only be necessary to have feeder wires on the “diverging” side of each switch.

