



GENERAL SPECIFICATION GUIDE LINES:

THESE SPECIFICATIONS SERVE AS A BASIC GUIDE FOR THE **NEW MEXICO NARROW GAUGE MODULE CLUB** CONSTRUCTION METHODS. THE SPECIFICATIONS REQUIRE THAT YOU FOLLOW ALL DIMENSIONS, USE ACCEPTED MATERIALS, AND MEET ELECTRICAL REQUIREMENTS. IN THE EVENT THAT RECOMMENDED MATERIALS ARE NOT USED AND PROBLEMS ARE ENCOUNTERED, YOU WILL BE REQUIRED TO MAKE THE REQUIRED CORRECTIONS BEFORE YOUR MODULE CAN BE USED IN A SHOW.

“REMEMBER THAT YOU ARE BUILDING A “SHOW QUALITY MODULE”.

SPECIFICATIONS: HO_{n3} GAUGE

MODULE OVERALL SIZE:

LENGTH: 4 FT NOMINAL, 2 FT MINIMUM, ANY LENGTH OVER 2 feet **WILL BE OK.**

WIDTH: 18” OR 24” (DOES NOT INCLUDE THICKNESS OF SKY BOARD).

LEGS: 2” X 2”, LENGTH 41-3/4”, NOTE METHOD OF PLACEMENT OF HEIGHT ADJUSTMENT SCREWS AND TEE NUTS.
(SEE **“LEG ASSEMBLY DRAWING”** FOR DETAILS)

BASE: ALL MODULE TOPS SHOULD BE MADE FROM 1/2” PLYWOOD FOR STRUCTURAL STRENGTH.
THE FASCIA BOARD IS TO BE CONSTRUCTED OF 1 X 4” PINE.
(ACTUAL SIZE 3/4 X 3 1/2”.)
TOTAL HEIGHT OF BASE IS 4”: 3 1/2’ FASCIA PLUS 1/2” PLYWOOD.
HO SCALE CORK ROADBED MUST BE USED TO SUPPORT ALL **MAINLINE TRACK. (FRONT AND RETURN TRACK).**
YARD AND SIDING ROADBED IS OPTIONAL.

SKY BOARD: HEIGHT: 21” OVERALL.
WIDTH: SHOULD RUN THE FULL LENGTH OF MODULE. SUGGEST USING 1/2” PLYWOOD CONSTRUCTION FOR STRUCTURAL INTEGRITY.

PROFILE BOARD: THE PROFILE BOARDS (NARROW ENDS) DETERMINE THE TRACK BASE TO FLOOR HEIGHT DISTANCE OF 48”.
(SEE **“PROFILE BOARD DRAWING”** FOR DETAILS)

PLEXIGLAS: PLEXIGLAS WILL BE USED FOR PROTECTION OF SCENERY, STRUCTURES, AND TO PREVENT ROLLING STOCK FROM FALLING TO THE FLOOR IN THE EVENT OF A DERAILMENT.
PLEXIGLAS WILL BE **CLEAR COLOR, 3/16” THICK, X 14 INCHES HIGH;** PLACED EVEN WITH THE BOTTOM OF THE FASCIA BOARD.
(10” OF EXPOSED PROTECTION).
THE **WIDTH MUST BE 1/2” NARROWER** THAN THE LENGTH OF THE MODULE AND PLACED 1/4” IN FROM THE ENDS OF THE MODULE. THE EDGES SHOULD BE SANDED SMOOTH AND ALL CORNERS ROUNDED TO PREVENT INJURY.

TRACK: MICRO ENGINEERING CO. **HOn3, CODE 70** FLEXTRACK FOR MAINLINE AND RETURN TRACK

MAINLINE TRACK, CURVED MAINLINE TRACK IS OK.
MINIMUM RADIUS 20" ON ALL CURVED TRACK.
THE LAST 1" OF THE MAINLINE TRACK ENDS MUST BE STRAIGHT (TO MAKE A SMOOTH TRANSITION FROM MODULE TO MODULE).
TRACK ENDS MUST BE LOCATED 6" ON CENTER FROM THE FRONT EDGE OF THE MODULE.

RETURN TRACK: THE RETURN TRACK WILL BE PLACED ON A SHELF BEHIND THE SKY BOARD AS A SEPARATE REMOVABLE SECTION OF THE MODULE ATTACHED TO THE REAR OF THE SKYBOARD.
THIS SHELF IS REMOVABLE FOR STORAGE AND TRANSPORTATION PURPOSES.

THE RETURN TRACK SHELF LENGTH IS 1/2" SHORTER THAN THE LENGTH OF YOUR MODULE. (1/4" GAP ON EACH END).
METHOD OF ATTACHMENT IS 2 C-CLAMPS.
THE DISTANCE CENTERLINE TO CENTERLINE BETWEEN THE MAINLINE AND RETURN TRACK IS 20-1/2 INCH.
(26-1/2" FROM THE FRONT EDGE OF THE MODULE).

FOR DETAILS SEE:
["RETURN TRACK ASSEMBLY DRAWING"](#)

TRACK SETBACK: THE MAINLINE TRACK SETBACK IS 3" FROM THE ENDS OF THE MODULE, CUT SQUARE AS POSSIBLE.
THE RETURN TRACK SETBACK IS 2-3/4" FROM THE END OF THE SHELF. A 6" SECTION OF TRACK WILL BE USE TO CONNECT MODULES TOGETHER.

TURNOUTS: USED ON THE MAINLINE WILL BE A MINIMUM #6, CODE 70.

BALLAST: COLOR OPTIONAL, SIZE FINE (SCALE SIZE 1" TO 3").
USE N SCALE BALLAST

ELECTRICAL: SEPARATE FEEDER LINES (2 REQUIRED) WILL RUN UNDER THE MODULE BASE AND THE RETURN SHELF TO SUPPLY TRACK POWER. THE FEEDER LINE ENDS SHOULD EXTEND 12" BELOW THE MODULE AND THE RETURN SHELF ON BOTH ENDS TO ALLOW FOR EASE IN CONNECTING TO ADJACENT MODULES. SUGGEST LENGTH OF CABLE TO BE THE LENGTH OF YOUR MODULE PLUS 2-FT.

CINCH JONES PLUGS WILL BE USED TO CONNECT ELECTRICAL POWER TO THE ADJACENT MODULES.

THE **WIDE PIN** IS CONNECTED TO THE **OUTSIDE RAILS**. (**MAINLINE AND RETURN TRACK**), LOOK AT IT AS THE **OUTSIDE RAILS** OF AN OVAL.

MALE CONNECTOR TO THE **RIGHT SIDE OF THE MODULE** FOR **MAINLINE TRACK** AND **LEFT SIDE** FOR THE **RETURN TRACK** (WHEN LOOKING AT THE MODULE **(FROM THE FRONT)**).

PLEASE OBSERVE POLARITY FOR THE PLUGS.

POWER SUPPLY: ALL MODULES MUST HAVE SOME FORM OF 110-VOLT WIRING TO PROVIDE POWER TO COMPONENTS ON THE MODULES AND TO ALLOW FOR THE TRANSFER OF POWER TO ADJACENT MODULES. THIS IS ACHIEVED BY USING A "UL" APPROVED OUTLET STRIP WITH A 8 FT MINIMUM POWER CORD. THE OUTLET STRIP IS TO BE INSTALLED AS CLOSE TO THE LEFT SIDE AS POSSIBLE. MALE PLUG TO THE RIGHT SIDE.

MODULE INSPECTION: A NEW MODULE MUST BE INSPECTED FOR ELECTRICAL AND MECHANICAL OPERATION PRIOR TO PARTICIPATION IN A SHOW. AT THE FIRST SHOW IT MUST BE OPERATED WITHOUT ANY BALLAST OR SCENERY, UNLESS APPROVED DURING A TEST OPERATING SESSION.

THE SHOW COORDINATOR HAS CONTROL OVER THE MODULE INSPECTIONS, REQUIREMENTS, AND SHOW ENTRIES.

PAINT SPECIFICATIONS: LEGS, FRAME AND BACK OF SKY BOARD ARE TO BE PAINTED:
Glidden Exterior Latex Semi-Gloss Northwest Green (70GY 08/075)

SKY BOARD FRONT TO BE PAINTED:
BEHR FLAT CHINA BLUE (RAH-49).

"BOTH PAINTS AVAILABLE AT HOME DEPOT."

OVERHEAD LIGHTING: SEE "**NMNGMC MODULE LIGHT V2**" DOCUMENT.

MATERIALS: 1. 2 EACH TRW/CINCH TWO PRONG CONNECTORS.

CONN JONES TYP 2CT MA 10A 730
MALE PLUG **P302CCT**

CONN JONES TYP 2CT FE 10A 730
FEMALE SOCKET **S302CCT.**

AVAILABLE AT: WALKER ELECTRONIC SUPPLY CO.
2615 Princeton Dr NE
Albuquerque, NM 87107

Toll Free: 800/824-9064
Local: 505/883-2992
<http://www.walkerradio.com/>

- 2 18/2 SPT-1 WIRE, CAROL #02301 (ZIP CORD/LAMP WIRE)
3. 110 VOLT AC WIRING, POWER STRIP, UL APPROVED.
4. 1/2" PLYWOOD.
5. 1 X 4" PINE.
6. 2 X 2" FOR LEGS.
7. 4 EACH, 3" X 1/4-20 CARRIAGE BOLTS FULLY THREADED AND 4 EACH 1/4" TEE NUTS FOR LEGS.

Or 1 PKG T-Nut Levelers (4 pack) #27P20
Woodcraft Store
4520B Alexander NE
Albuquerque NM 87107
505-342-9664
<http://www.woodcraft.com/Product/2001073/10131/TNut-Levelers-4-pack.aspx>

8. DRY WALL SCREWS, NAILS, AND ELMER'S CARPENTER WOOD GLUE.

SHOW HARDWARE: 4 EA. 2" "C" CLAMPS PER FIRST MODULE

2 EA ADDITIONAL "C" CLAMPS FOR EACH ADDITIONAL MODULE.
PLUS ANY ADDITIONAL "C" CLAMPS FOR REAR SHELF
ATTACHMENT.

ROLLING STOCK: KADEE # 714, HO_n3 COUPLERS WILL BE USED FOR OPERATIONAL
COMPATIBILITY.

REV. 1 2/25/05
REV. 2 5/14/05
REV. 3 9/20/06
REV. 4 1/27/09
REV. 5 6/24/12
REV. 5.1 7/18/12