

National Model Railroad Association

[Home](#) :: [Achievement Program](#) :: [Structures](#)

Achievement Program

Master Builder - Structures

When you think of "structures" don't just think of buildings and bridges.

Structures are just about anything on the layout that was man made and doesn't fit into one of the other Master Builder categories. These are just some examples of the types of 'structures' that you could build to earn this certificate: buildings (all kinds), factories, bridges (all kinds), signal towers, oil derricks, docks, power line towers, cranes (stationary or mobile), ships, etc.

Of course, there is a certain level of complexity expected to qualify for a merit award. If you take a plank and put it across a drainage ditch and call it a bridge, it is unlikely to score 87-1/2 points no matter how nicely modeled a plank it is!

Contact your [Regional AP Manager](#) if you have a question about which category a particular model would fall into.

To qualify for the Master Builder - Structures certificate:

1. You must construct twelve scale structures:

- A. At least six different types of structures must be represented in the total.

The intent of this requirement is show that you can model a variety of types of structures, not just several variations of the same type. For example: a wood frame station and a brick station would be different types, but a wood frame station from Kansas and wood frame station from California would probably not, unless you could show that there was a substantial difference in the construction. When in doubt, why try and split hairs? Instead, try your hand at building something completely different. You might learn some new modeling skills in the process, and who knows ? You could even have fun doing it!

- B. One of the six types must be a bridge or trestle.

Before you panic with visions of elaborate wooden trestles dancing in your head, stop for a moment and consider just how many different types of bridges and trestles there on or around a railroad. Remember, your bridge doesn 't have to span the Grand Canyon; a short span over a creek or dirt road may be enough. The point is to demonstrate that you know how to build a bridge that is appropriate and will support the load that it has to carry. If there is no place on your layout for the tracks to cross a bridge, how about a bridge that carries something else? You could replace a grade crossing with a bridge that carries the road up and over the tracks (as many prototype railroads have been doing in recent years), or build a foot bridge like the ones over many rail yards Finally, remember that you can even build the

bridge as a separate model - it doesn't have to go on your layout.

C. At least six of the models must be scratch built.

The following parts are specifically excluded from the scratch built requirement (although you may scratch build them for additional points):

- Light bulbs & electronics
- Paint, decals, etc.
- Figures
- Basic shapes of wood, plastic, metal, etc.

Something that you should remember if the idea of "scratch building" intimidates you: There is very little difference between scratch building and building most craftsman kits. The big difference is that in a kit the manufacturer has assembled the materials that you will need, for you. Only the construction need to be done from scratch. If you take someone else's plans and instructions (even those from a kit) and go to the hobby shop and buy the materials yourself and assemble them, that qualifies as scratch building. On the other hand, if you do develop your own plans, make sure that you tell judges that, as it will earn you extra points.

D. The remaining six, if not scratch built, must be super-detailed with scratch built or commercial parts (for extra points).

There are all sorts of ways to super detail structures. Look closely at what you are trying to model, and see the little details: signs, ladders, electrical fixtures, window details, roof details, etc. For buildings, including an interior (and a way to see it) is definitely recommended, with as much of it as possible scratch built for extra points. Including some sort of "scene within a scene" is a good way to catch the judges' eye. Adding detail to your structures will not only meet this part of the requirements, but will also add to your score, and to the overall appeal of your model.

One way to save money and increase your scratch building score is to buy only one of a particular detail part, and use it as a model to make the rest yourself. This means build the others yourself from scratch, NOT to use the commercial part as a master to make a mold to cast copies of it.

2. You must earn a score of at least 87-1/2 points on six of the twelve models in either an NMRA sponsored contest or in AP Merit Award judging.

Note that only six of the twelve must earn 87-1/2 points. The others don't even have to be judged! They do all have to be described on the Statement of Qualification (see below).

3. You must submit a Statement of Qualification (SOQ - available from the Regional AP Manager) which includes the following:

- An attachment giving a detailed description of each of the twelve models, including:
 - Identification of all scratch built features
 - All commercial components used

- Materials used in building the model
- A notation that the model is operational, if it is intended to be
- If the model is a kit, whose kit is it?
- Verification of the Merit Awards (photocopies of the certificates or signed Judging Forms)
- Photos of the model are helpful, though not required.

Your twelve structures do not all have to be of the same scale or era, or on the same layout. In fact, in most cases, it's better to build the structure separately, have it judged (either in a contest or in separate Merit Judging), and then install it in its final location. In this way, the judges can get a better look at it.

Note: Many contests require that structures NOT be mounted on any kind of scened base, or they will be considered "Displays". However, for separate Merit Judging, they can be part of your layout.

Further Information

Contact National Achievement Program General Manager, Paul Richardson, MMR achiev@hq.nmra.org, or your Region or Division Achievement Program Manager for more information.

Also refer to the articles "Master Builder - Structures," and "The Building Inspector," both in the NMRA Bulletin, August 1991.

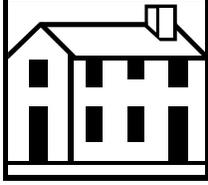
Forms available for this category:

- SOQ Form: (PDF)
- Record and Validation form: (PDF)
- Judging Form: (PDF)

Copyright (c) 1995-2012 National Model Railroad Association. All Rights Reserved.

Last Updated: Tuesday July 01, 2008

National Model Railroad Association, Inc.
4121 Cromwell Rd., Chattanooga, TN 37421
Phone: (423) 892-2846 - Fax: (423) 899-4869
Email Contact List



**ACHIEVEMENT PROGRAM
MASTER BUILDER STRUCTURES
STATEMENT OF QUALIFICATIONS FORM
May 2006**

page 1 of 2

Member's Name: _____ NMRA #: _____ Exp: _____

Street: _____ City: _____ State/Prov: _____

ZIP/PC: _____ Country: _____ NMRA Region: _____

Date Submitted: _____ E-Mail: _____ Phone: _____

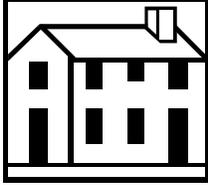
To qualify for this certificate you must:

1. Build twelve scale structures. At least six different types of structures must be represented in the total. One must be a bridge or trestle. At least six must be scratchbuilt. The remaining six structures, if not scratchbuilt, must be super-detailed with either scratchbuilt or commercial parts as defined in the "DEFINITIONS" section.

2. Earn a Merit Award of at least 87.5 points with six of the above models; either via an NMRA sponsored contest or AP Merit Awards.

3. Submit a completed Statement of Qualifications (SOQ) which shall include the following:

- Attachment giving detailed descriptions of the models.
- Identification of the scratchbuilt features.
- List of all the commercial components appearing on each model.
- The materials used in building the models, including a notation that the model is operational if intended to be.
- Verification of the Merit Awards.



**ACHIEVEMENT PROGRAM
 MASTER BUILDER STRUCTURES
 STATEMENT OF QUALIFICATIONS FORM
 May 2006**

	DESCRIPTION	SCRATCH BUILT	MERIT AWARD	VERIFIED BY	DATE	NMRA #
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Member's Statement and Agreement:

I certify that I have completed all of the requirements for this Certificate of Achievement as listed above and that I will agree to assist other members in this subject whenever possible, whether or not they are participants in the Achievement Program.

NAME: _____ SIGNATURE: _____ Date: _____

Certification of Regional Achievement Program Chair

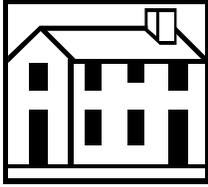
As the NMRA Regional Achievement Program Chair of the _____, I certify that I have examined this SOQ and, having compared it to the stated requirements for this certificate, I am satisfied that the stated requirements have been met.

NAME: _____ SIGNATURE: _____ Date: _____

Region Cert #: _____

Approval by AP National Executive Vice-Chair

NAME: _____ SIGNATURE: _____ Date: _____



ACHIEVEMENT PROGRAM MASTER BUILDER STRUCTURES RECORD AND VALIDATION FORM May 2006

PLEASE ATTACH THIS FORM TO A COMPLETED STATEMENT OF QUALIFICATIONS (SOQ) FORM.

Member's Name: _____

NMRA #: _____

Date Submitted: _____

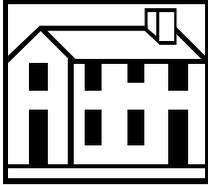
Region: _____

To qualify for this certificate you must:

1. Build twelve scale structures. At least six different types of structures must be represented in the total. One must be a bridge or trestle. At least six must be scratchbuilt. The remaining six structures, if not scratchbuilt, must be super-detailed with either scratchbuilt or commercial parts as defined in the "DEFINITIONS" section..
2. Earn a Merit Award of at least 87.5 points with six of the above models; either via an NMRA sponsored contest or AP Merit Awards.
3. Submit a completed Statement of Qualifications (SOQ) which shall include the following:
 - Attachment giving detailed descriptions of the models.
 - Identification of the scratchbuilt features.
 - List of all the commercial components appearing on each model.
 - The materials used in building the models, including a notation that the model is operational if intended to be.
 - Verification of the Merit Awards.

	DESCRIPTION	SCRATCH BUILT	MERIT AWARD	VERIFIED BY	DATE	NMRA #
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

REGIONAL AP CHAIR: _____ REGION: _____ DATE: _____



ACHIEVEMENT PROGRAM MASTER BUILDER STRUCTURES JUDGING FORM May 2006

PLEASE ATTACH THIS FORM TO A COMPLETED STATEMENT OF QUALIFICATIONS (SOQ) FORM.

Member's Name: _____

NMRA #: _____

Date Submitted: _____

Region: _____

Model: _____

The undersigned judges certify that the model of a structure described above, built by the above named NMRA member, has been personally examined by two or more judges appointed by the Region AP Chair; that the model is either scratchbuilt or is super-detailed (as defined in the NMRA AP Regulations "DEFINITIONS" Section); is operational and meets all applicable NMRA Standards; has earned a minimum score of 87.5 points; and has been awarded a Merit Award.

MERIT AWARD SCORING SCHEDULE

CATEGORY	DESCRIPTION	POINTS	SCORE
CONSTRUCTION	Workmanship	0-40	
DETAIL	Quality & Amount	0-20	
CONFORMITY	Prototype Practice	0-25	
FINISH & LETTERING	General Appearance	0-25	
SCRATCHBUILT	Amount of Parts Built by the Modeler	0-15	
Total			

NOTE

Exempted Parts: light bulbs, electronics, basic wood, metal and plastic shapes. The above commercial parts may be used on a model and the model is still considered to be scratchbuilt.

JUDGE'S NAME	SIGNATURE	NMRA #

REGIONAL AP CHAIR: _____ REGION: _____ DATE: _____