

INTRODUCTION TO FORD ENGINEERING MATERIAL SPECIFICATIONS

Material Classification and Specification Codification

Engineering Material Specifications (ES-M's) are used to define product materials released by Product Engineering Offices (PEO's) for use in Company products and/or for merchandising by Company activities.

ES-M's are prefaced with a three-letter designation, a feature which distinguishes them from other types of Company specifications. A typical material specification callout is written as follows: ESB-M4D240-A.

The first two letters are "ES" for "Engineering Specification". The third letter identifies the specific Product Engineering Office which originally wrote and released the specification. For example, the following codes currently are used:

ESA - Chassis Engineering	ESN/ - Ford Tractor Operations
ESB - Body & Electrical Engrg.	ESEN
ESE - Engine Engineering	ESP - Transmission & Axle Engrg.
ESF - Electrical & Electronics Div.	ESR - Ford Parts & Service Div.
ESH - Climate Control Div.	ESS - Engineering & Research Staff
ESL - Light Truck Engineering	EST - Heavy Truck Engineering

(Inquiries regarding specification content should be directed to the responsible materials engineering activity as identified on page 5.)

Following the three-letter prefix is the letter "M" for "Materials".

Next is a set of alpha-numeric symbols consisting of one or two digits plus a letter to indicate the major and sub-category of the material. For example in the "4D" category, "D" indicates "Rubber and Plastics". The "4" further identifies it as "Thermoplastic".

The next series of non-significant digits serves only to distinguish the subject specification from others in the same category.

The suffix identifies the "revision level" of the specification, the original normally carrying suffix "A". Subsequent revisions that include a new or a more restrictive requirement of such nature that formerly approved materials do not meet it are identified by a suffix advancement, normally to the "B" level, etc. However, a suffix-advanced specification does not necessarily obsolete or replace the preceding suffix level. The specification number on the engineering drawing, complete with suffix, remains valid.

The occasional use of a digit following the suffix within a given specification number distinguishes between "types" of materials. These types are very similar to each other, but sufficiently different to require certain differences in property requirements.

The use of the inverted delta (∇) at the beginning of an ES-M number indicates extra controls of specific requirements which may affect compliance with certain government regulations. The specific requirements being controlled are identified by the ∇ preceding those requirements (See Quality Control Specification Q-101).

April 9, 1979

AB01 1299