

## Selection Procedure for NF Merchandised Panelboards

1. Review maximum electrical system voltage, ampacity, and available fault current, and determine the type of panelboard is desired (see [NF and I-Line™ Panelboards](#), page 9-5).
2. Identify total quantity of branch circuit breaker poles and panel spaces required (see Digest sections 7 and 9 for catalog numbers).
3. Select proper main lug interior from [NF Main Lug Interiors](#), page 9-28 or:
  - Select main circuit breaker interior and main circuit breaker adapter kit from [NF Main Circuit Breaker Interiors - 600Y/347 Vac Max.](#), page 9-29 based upon the equivalent number of poles and ampere rating.  
**NOTE:** Interiors include solid neutral and are field convertible to top-feed.
  - If a main circuit breaker interior was selected, select a vertical main circuit breaker (or fuse) from PowerPacT H-, J-, L-, or LA/LH frame circuit breakers pages in Section 7 or a back-fed E-frame circuit breaker from Section 9 of the Digest.
4. Select ground bars from tables [Table 9.80](#) and any non-standard neutral assembly (i.e., 200% neutral for non-linear loads) from [Table 9.74](#).
  - Please note that an aluminum ground bar kit is included with NF Panelboard Interiors.
5. Select any required sub-feed circuit breakers, sub-feed lugs (SFL), or feed-through lugs (FTL) kits:
  - Subfeed circuit breaker (SFB), sub-feed lugs (SFL) or feed-through lugs (FTL) kits: [Table 9.75](#) in the NF Accessories sections.
  - For subfeed circuit breakers, select PowerPacT H-, J-, L- frame circuit breaker from Section 7 of the Digest.
6. Determine the total enclosure height required by adding requirements from interior, main circuit breaker, neutrals, SFL, FTL, or sub-feed circuit breaker.
7. Select enclosure from the tables, [Table 9.76](#), and [Table 9.77](#).  
NEMA Type 1—select box and front (cover) catalog number corresponding to interior catalog number.  
NEMA Type 3R, 5, 12—select enclosure. Cover for Type 3R, 5, 12 is included with the enclosure.
8. Select the branch circuit breakers to be installed in the panel.  
For NF panelboards, use E-frame circuit breakers from [E-frame Thermal-magnetic \(480Y/277 Vac Max\) Maximum allowable branch breaker pair combination = 170 A, 100 A Maximum at 600Y/347 Vac](#), page 9-30.
9. Select options and accessories from tables [Table 9.74–Table 9.80](#).  
**NOTE:** Additional NF and NQ options may be found in the [Supplemental Digest, Section 4](#).

### NF Merchandised Selection Example

**480Y/277 Vac, 3Ø4W, 25 kA SCCR, fully rated, copper bus, 100 A, main circuit breaker, Type 1, flush-mount, bolt-on, branch circuit breakers**

Branches	Table No.	Catalog Number	Spaces
(13) 20/1		EGB14020	13
one 40/2		EGB24040	2
one 50/3		EGB34050	3

Total 18 spaces

			Min. Box Height
125 A MLO Cu Bus Interior	<a href="#">page 9-28</a>	NF418L1C	—
With Main Circuit Breaker Adapter Kit	<a href="#">page 9-29</a>	N150MH	38 inches
Main Circuit Breaker	Section 7	HGL36100	—
Enclosure (Box)	<a href="#">page 9-29</a>	MH38	—
Front (Cover)	<a href="#">page 9-29</a>	NC38F	—

Total 38 inches