

CERTIFICATE OF COMPLIANCE - Envelope (part 1 of 2) ENV-1 page 1 of 5  
 Project Name: Point Vicente Interpretive Center Exp. IDate: 9/2/1998  
 Address: 31501 Palos Verdes Drive West Building Permit No.  
 Rancho Palos Verdes, CA Checked by / Date  
 Envelope Designer: ICDMPY 24 User 4443  
 Documentation: F. T. Andrews, Inc. ICDMPY 24 User 4443

GENERAL INFORMATION Building Conditioned Floor Area: 8247 sf  
 Date of Plans: Building Type: Nonresidential Climate Zone: 6  
 Phase of Construction: ☐ New Construction ☐ Addition ☐ Alteration  
 Method of Envelope Compliance: Prescriptive - Overall Envelope

STATEMENT OF COMPLIANCE  
 This Certificate of Compliance lists the Building features and performance specifications needed to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to building envelope requirements.

The documentation preparer hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR  
 David Mitchell (Signature) (Date)  
 (714) 772-9193

The Principal Envelope Designer hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with this permit application. The proposed building has been designed to meet the envelope requirements contained in sections 110, 116 through 118, and 140, 142, 143 or 149 of Title 24, Part 6, Chapter 1.

Please check one:

- ☐ I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation and that I am a civil engineer or architect.
- ☐ I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code by Section 5537.2 of the Business and Professions Code to sign this document as the person responsible for its preparation and that I am a licensed contractor preparing documents for work that I have contracted to perform.
- ☐ I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code by Section 5537.2 of the Business and Professions Code to sign this document as the person responsible for its preparation and for the following reason:

PRINCIPAL ENVELOPE DESIGNER (Signature) (LIC #) (Date)

ENVELOPE MANDATORY MEASURES  
 Indicate location on plans of Note Block for Mandatory Measures: \_\_\_\_\_

CERTIFICATE OF COMPLIANCE - Mechanical (part 3 of 3) MECH-1 page 5 of 5  
 Project Name: Point Vicente Interpretive Center Exp. IDate: 9/2/1998  
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| DUCT INSULATION System Name  | Type                   | Duct Location | Duct Tape Allowed | Insul R-Val | Note to Field |
|------------------------------|------------------------|---------------|-------------------|-------------|---------------|
| CARRIER 48HJD009             | Heating Ducts in Attic | Y             | Y                 | 4.2         | 1             |
| CARRIER 48HJD007             | Cooling Ducts in Attic | Y             | Y                 | 4.2         | 1             |
| CARRIER 58CTX135-22 38HDC060 | Heating Ducts in Attic | Y             | Y                 | 4.2         | 1             |
| REZNOR RPB-125               | Cooling Ducts in Attic | Y             | Y                 | 4.2         | 1             |
|                              | Heating Ducts in Attic | Y             | Y                 | 4.2         | 1             |

| PIPE INSULATION System Name | Pipe Type   | Insul Required | Note to Field |
|-----------------------------|-------------|----------------|---------------|
| Domestic Hot Water          | Refrigerant | Y              | 1             |
| CU-1/FC-1                   |             |                |               |

NOTES TO FIELD - For Building Department Use Only

CERTIFICATE OF COMPLIANCE - Envelope (part 2 of 2) ENV-1 page 2 of 5  
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| OPAQUE SURFACES Assembly Name | Const Type | Location/Comments | Note to Field |
|-------------------------------|------------|-------------------|---------------|
| R-13 Wall (W. 13x4.18)        | Wood       |                   |               |
| R-19 Roof (R. 19x2x8.16)      | Wood       |                   |               |

| FENESTRATION Orient | Panes | Frame Type | Exterior Shade | UH | Glazing Type            |
|---------------------|-------|------------|----------------|----|-------------------------|
| Front (ND)          | 1     | Wood       | None           | N  | Single Clear Default(N) |
| Front (ND)          | 1     | Wood       | None           | Y  | Single Clear Default(N) |
| Front (NE)          | 1     | Wood       | None           | N  | Single Clear Default(N) |
| Left (SE)           | 1     | Wood       | None           | Y  | Single Clear Default(N) |
| Back (S)            | 1     | Wood       | None           | Y  | Single Clear Default(N) |
| Back (SW)           | 1     | Wood       | None           | Y  | Single Clear Default(N) |
| Right (W)           | 1     | Wood       | None           | Y  | Single Clear Default(N) |
| Right (NW)          | 1     | Wood       | None           | Y  | Single Clear Default(N) |

CERTIFICATE OF COMPLIANCE - Mechanical (part 1 of 3) MECH-1 page 3 of 5  
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 Mechanical Designer: ICDMPY 24 User 4443  
 Documentation: F. T. Andrews, Inc. ICDMPY 24 User 4443

GENERAL INFORMATION Building Conditioned Floor Area: 8247 sf  
 Date of Plans: Building Type: Nonresidential Climate Zone: 6  
 Phase of Construction: ☐ New Construction ☐ Addition ☐ Alteration  
 Method of Mechanical Compliance: Prescriptive  
 Proof of Envelope Compliance: ☐ Previous Permit ☐ Compliance Attached

STATEMENT OF COMPLIANCE  
 This Certificate of Compliance lists the Building features and performance specifications needed to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to building mechanical requirements.

The documentation preparer hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR  
 David Mitchell (Signature) (Date)  
 (714) 772-9193

The Principal Mechanical Designer hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with this permit application. The proposed building has been designed to meet the mechanical requirements contained in sections 110 through 115, 120 through 124, 140 through 142, 144 and 145.

Please check one:

- ☐ I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation and that I am a civil engineer mechanical engineer or architect.
- ☐ I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code by Section 5537.2 of the Business and Professions Code to sign this document as the person responsible for its preparation and that I am a licensed contractor preparing documents for work that I have contracted to perform.
- ☐ I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code by Section 5537.2 of the Business and Professions Code to sign this document as the person responsible for its preparation and for the following reason:

PRINCIPAL MECHANICAL DESIGNER (Signature) (LIC #) (Date)

MECHANICAL MANDATORY MEASURES  
 Indicate location on plans of Note Block for Mandatory Measures: \_\_\_\_\_

CERTIFICATE OF COMPLIANCE - Mechanical (part 2 of 3) MECH-1 page 4 of 5  
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SYSTEM FEATURES Note to Field

| System Name          | AC-1/AC-3               | AC-2                    |
|----------------------|-------------------------|-------------------------|
| Time Control         | S                       | S                       |
| Setback Control      | Both                    | Both                    |
| Ref. Isolation Zones | n/a                     | n/a                     |
| HP Thermostat        | n/a                     | n/a                     |
| Electric Heat        | n/a                     | n/a                     |
| Fan Control          | Constant Volume         | Constant Volume         |
| VAV Min Position     | n/a                     | n/a                     |
| Simul. Heat/Cool     | n/a                     | n/a                     |
| Heat Supply Reset    | Constant Temp           | Constant Temp           |
| Cool Supply Reset    | Constant Temp           | Constant Temp           |
| Ventilation          | B                       | B                       |
| DA Damper Control    | A                       | A                       |
| Economizer Type      | Fixed Enth (Integrated) | Fixed Enth (Integrated) |
| Outdoor Air CFM      | 850/1375                | 850/1375                |
| Heat Equip. Type     | Gas Furnace             | Gas Furnace             |
| Make & Model No.     | CARRIER 48HJD009        | CARRIER 48HJD007        |
| Efficiency           | 82% AFUE                | 82% AFUE                |
| Cool Equip. Type     | DA Carrier 48HJD009     | CARRIER 48HJD007        |
| Make and Model       | 11.6 EER                | 11.0 EER                |
| Efficiency           |                         |                         |

| Code Tables | Time Control   | Ventilation    | DA Damper  |
|-------------|----------------|----------------|------------|
|             | S: Prog Switch | B: Air Balance | A: Auto    |
|             | D: Occ Sensor  | C: DA Cent.    | G: Gravity |
|             | M: Man Timer   | M: DA Measure  |            |
|             |                | D: Demand Cont |            |
|             |                | N: Natural     |            |

# MECHANICAL MANDATORY MEASURES Part 1 of 2 MECH-MM

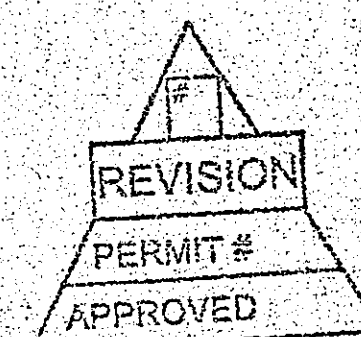
| DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Designer | Enforcement |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|
| <b>Equipment and Systems Efficiencies</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |             |
| <input checked="" type="checkbox"/> 111 Any appliance for which there is a California standard established in the Appliance Efficiency Regulations will comply with the applicable standard.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |             |
| <input checked="" type="checkbox"/> 115(a) Fan type central furnaces that do not have a pilot light.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |             |
| <input checked="" type="checkbox"/> 123 Piping, except that carrying fluids at temperatures between 60 and 105 degrees Fahrenheit, or with HMC equipment, shall be insulated in accordance with Standards Section 123.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |             |
| <input checked="" type="checkbox"/> 124 Air handling duct systems shall be insulated and installed in compliance with Sections 601, 603 and 604 of the Uniform Mechanical Code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |             |
| <b>Controls</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |             |
| <input checked="" type="checkbox"/> 122(a) Each space conditioning system shall be installed with one of the following:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |             |
| <input checked="" type="checkbox"/> 122(a)(1) Each space conditioning system serving building types such as offices and manufacturing facilities (and all others not explicitly exempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an accessible manual override that allows operation of the system during off-hours for up to 4 hours. The time switch shall be capable of programming different schedules for heating and cooling, incorporate an automatic holiday "shut-off" feature that turns off all loads for at least 24 hours, then resumes the normally scheduled schedule and has program backup capability that prevents the loss of the device's program and time setting for at least 10 hours if power is interrupted, or |          |             |
| <input checked="" type="checkbox"/> 122(a)(2) An occupancy sensor to control the operating period of the system or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |             |
| <input checked="" type="checkbox"/> 122(a)(3) A 4-hour timer that can be manually operated to control the operating period of the system.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |             |
| <input checked="" type="checkbox"/> 122(a)(4) Each space conditioning system shall be installed with controls that temporarily restrict and temporarily operate the system as required to maintain a setback heating and cooling thermostat setback.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |             |
| <input type="checkbox"/> 122(a) Each space conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 square feet shall be provided with isolation zones. Each zone shall not exceed 25,000 square feet; shall be provided with isolation devices, such as valves or dampers, that allow the supply of heating or cooling to be isolated or shut off independently of other isolation zones and shall be controlled by a time control device as described above.                                                                                                                                                                                                                                                                                       |          |             |
| <input checked="" type="checkbox"/> 122(a)(b) Each space conditioning system shall be controlled by an individual thermostat that responds to temperature within the zone. Where used to control heating, the control shall be adjustable down to 55 degrees F or lower. For cooling, the control shall be adjustable up to 85 degrees F or higher. Where used for both heating and cooling, the control shall have a dead band of at least 5 degrees F.                                                                                                                                                                                                                                                                                                                                       |          |             |
| <input checked="" type="checkbox"/> 122(a) Thermostats shall have remote setpoints in degrees Fahrenheit (F) and adjustable setback rates accessible via the authorized personnel.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |             |
| <input type="checkbox"/> 112(b) Heat pumps shall be installed with controls to prevent electric resistance supplementary heater operation when the heating load can be met by the heat pump alone.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |             |

# MECHANICAL MANDATORY MEASURES Part 2 of 2 MECH-MM

| DESCRIPTION                                                                                                                                                                                                                                                                                                                                   | Designer | Enforcement |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|
| <b>Ventilation</b>                                                                                                                                                                                                                                                                                                                            |          |             |
| <input checked="" type="checkbox"/> 121(a) Controls shall be provided to allow outside air dampers or devices to be operated at the ventilation rates as specified on these plans.                                                                                                                                                            |          |             |
| <input checked="" type="checkbox"/> 121(b) Gravity or automatic dampers interlocked and closed on fan shutdown shall be provided on the outside air intakes and discharges of all space conditioning and exhaust systems.                                                                                                                     |          |             |
| <input checked="" type="checkbox"/> 121(c) All gravity venting systems shall be provided with automatic or readily accessible manually operated dampers in all openings to the outside, except for combustion or openings.                                                                                                                    |          |             |
| <input checked="" type="checkbox"/> 122(1) Air Balancing: All space conditioning and ventilation systems shall be balanced to the quantities specified in these plans, in accordance with the National Environmental Balancing Bureau (NEBB) Procedural Standards (1983), or Associated Air Balance Council (AABC) National Standards (1986). |          |             |
| <input checked="" type="checkbox"/> 122(2) Outside Air Certification: The system shall provide the minimum outside air as shown on the mechanical drawings, and shall be measured and certified by the installing licensed C-22 mechanical contractor.                                                                                        |          |             |
| <b>Service Water Heating Systems</b>                                                                                                                                                                                                                                                                                                          |          |             |
| <input checked="" type="checkbox"/> 113(b)(2) If a circulating hot water system is installed, it shall have a control capable of automatically limiting off the circulating pump(s) when hot water is not required.                                                                                                                           |          |             |
| <input checked="" type="checkbox"/> 113(b)(3) Landscapes in restaurants of public facilities shall be equipped with controls to limit the outlet temperature to 150 degrees F.                                                                                                                                                                |          |             |
| <input checked="" type="checkbox"/> 113(b)(3) Landscapes in restaurants of public facilities shall be equipped with one of the following:                                                                                                                                                                                                     |          |             |
| Outlet devices that limit the flow of hot water to a maximum of 0.5 gallons per minute.                                                                                                                                                                                                                                                       |          |             |
| First actuated control valves, and outlet devices that limit the flow of hot water to a maximum of 0.75 gallons per minute.                                                                                                                                                                                                                   |          |             |
| Pressure sensor actuated control valves, and outlet devices that limit the flow of hot water to a maximum of 0.75 gallons per minute.                                                                                                                                                                                                         |          |             |
| Self-closing valves, and outlet devices that limit the flow of hot water to a maximum of 2.5 gallons per minute, and 0.25 gallons/cycle (circulating system).                                                                                                                                                                                 |          |             |
| Self-closing valves, and outlet devices that limit the flow of hot water to a maximum of 2.5 gallons per minute, and 0.50 gallons/cycle (non-circulating system).                                                                                                                                                                             |          |             |
| Self-closing valves, and outlet devices that limit the flow of hot water to a maximum of 2.5 gallons per minute, and 0.75 gallons/cycle (hot water and pressure sensor controls).                                                                                                                                                             |          |             |
| Maximum outlet temperature: 110F                                                                                                                                                                                                                                                                                                              |          |             |

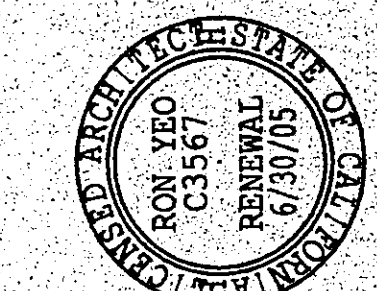
# NONRESIDENTIAL ENERGY STANDARDS COMPLIANCE (TITLE 24, PART 6, CH. 12)

- BEFORE THE BUILDING MAY BE OCCUPIED, INSTALLATION CERTIFICATES FOR MANUFACTURED DEVICES REGULATED BY THE APPLIANCE STANDARDS OR PART 6, SHALL BE POSTED ADJACENT TO THE BUILDING PERMITS.
- CERTIFICATES SHALL:
- IDENTIFY FEATURES REQUIRED TO VERIFY COMPLIANCE WITH THE APPLIANCE STANDARDS AND PART 6.
  - INCLUDE A STATEMENT INDICATING THAT THE INSTALLED DEVICES CONFORM TO THE APPLIANCE STANDARDS AND PART 6 AND THE REQUIREMENTS FOR SUCH DEVICES GIVEN IN THE PLANS AND SPECIFICATIONS APPROVED BY THE LOCAL ENFORCEMENT AGENCY.
  - STATE THE BUILDING PERMIT NUMBER UNDER WHICH THE CONSTRUCTION OR INSTALLATION WAS PERFORMED. Sec. 10-103(c)3
- THE BUILDER SHALL PROVIDE THE BUILDING OWNER, MANAGER, AND ORIGINAL OCCUPANTS THE FOLLOWING:
- A LIST OF HEATING, COOLING, WATER HEATING, AND LIGHTING SYSTEMS & FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES CONSERVATION OR SOLAR DEVICES INSTALLED IN THE BUILDING, AND INSTRUCTIONS ON HOW TO USE THEM EFFICIENTLY.
  - REQUIRED ROUTING MAINTENANCE ACTION SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE LABEL. THE LABEL MAY BE LIMITED TO IDENTIFYING THE MAINTENANCE MANUAL.
  - A DESCRIPTION OF THE QUANTITIES OF OUTDOOR AND RECIRCULATED AIR THAT THE VENTILATION SYSTEM IS DESIGNED TO PROVIDE FOR EACH AREA. Sec. 10-103(b)
- AFTER INSTALLING WALL, CEILING, OR FLOOR INSULATION, THE INSTALLER SHALL POST IN A CONSPICUOUS LOCATION IN THE BUILDING A CERTIFICATE SIGNED BY THE INSTALLER STATING THAT THE INSTALLATION IS CONSISTENT WITH THE PLANS AND THE REQUIREMENTS OF SECTION 10-103(a)2. A. THE CERTIFICATE SHALL ALSO STATE THE MANUFACTURER'S NAME AND MATERIAL IDENTIFICATION AND THE INSTALLED R-VALUE. Sec. 10-103(c)4
- MANUFACTURED FENESTRATION PRODUCTS SHALL HAVE A PERMANENT LABEL LISTING THE U-VALUE, CERTIFYING ORGANIZATION, AND RATING PROCEDURES. Sec. 116(a)
- SITE CONSTRUCTED DOORS, WINDOWS AND SKYLIGHTS SHALL BE CAULKED BETWEEN THE UNIT AND THE BUILDING, AND SHALL BE WEATHERSTRIPPED (EXCEPT FOR UNFRAMED GLASS DOOR AND FIRE DOORS). Sec. 116(b)
- ALL EXTERIOR JOINTS AND OPENINGS IN THE BUILDING ENVELOPE THAT ARE OBSERVABLE SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED. Sec. 117(a)
- ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF SECTIONS 1712 AND 1713 OF THE UBC. Sec. 118(c)
- OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE DURING PERIODS OF NON-USE OF THE AREAS SERVED BY EQUIPMENT. Sec. 122(f)
- WATER HEATING SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC TEMPERATURE CONTROLS CAPABLE OF ADJUSTMENT FROM THE LOWEST TO THE HIGHEST ACCEPTABLE TEMPERATURE SETTINGS FOR THE INTENDED USE AS LISTED IN TABLE 2, CHAPTER 54 OF THE 1987 ASHRAE HANDBOOK, HVAC SYSTEMS & APPLICATIONS VOLUME. Sec. 113(a)2
- THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY SEC. 121(b)2 SHALL BE SUPPLIED TO THE ENTIRE BUILDING DURING THE ONE-HOUR PERIOD IMMEDIATELY BEFORE THE BUILDING IS NORMALLY OCCUPIED. Sec. 121(c)2



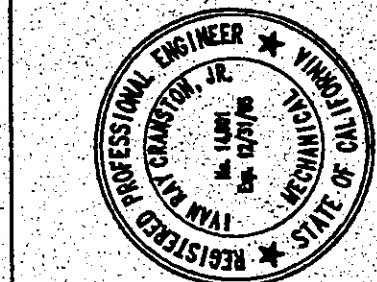
APPROVALS  
 Architect

FOR THE CITY OF LOS ANGELES  
 DEPARTMENT OF BUILDING SAFETY  
 1200 N. GILBERT STREET, 12TH FLOOR  
 LOS ANGELES, CA 90012  
 (213) 475-4444  
 FAX (213) 475-4445  
 WWW.CITYOFLOSANGELES.GOV



FTA  
 F. T. ANDREWS, INC.  
 31501 PALOS VERDES DRIVE WEST  
 RANCHO PALOS VERDES, CA 90275  
 (714) 772-9193  
 FAX (714) 772-9194

PLANS PREPARED BY:



POINT VICENTE INTERPRETIVE  
 CENTER EXPANSION  
 31501 Palos Verdes Drive West  
 Rancho Palos Verdes, CA

California State  
 Title-24 Compliance  
 Documentation

DESIGN  
 DSM  
 CHECKED  
 LL  
 2/1/99  
 SCALE  
 NONE  
 JOB NO.  
 97-123  
 SHEET  
 CBM  
 M-6  
 63 OF 69 SHEETS