

0737P ESCEA FIREPLACES**Branded worksection**

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Worksection abstract

This branded worksection *Template* is applicable to ESCEA and MODE branded gas fireplaces. It includes indoor built-in and freestanding, ducted and unducted, single and double sided gas fireplaces. It also includes outdoor gas fireplaces. The worksection is written for use without other mechanical worksections (for example in a building specification) or it may be incorporated into a mechanical specification by deleting material covered in other mechanical worksections.

How to use this worksection

This worksection *Template* must be customised for each project. See A guide to NATSPEC worksections (www.natspec.com.au) for information on *Template* structure, word styles, and completing a worksection.

Related material located elsewhere in NATSPEC

Related material may be found in other worksections. See for example:

- *0792 Mechanical maintenance.*
- *0824 Fuel gas.*

Material not provided by ESCEA

This branded worksection *Template* includes generic material which may not be provided by the Product Partner.

Documenting this and related work

You may document this and related work as follows:

- Show location of gas and electrical supply connections. Electrical requires a socket outlet, gas requires an accessible isolating valve.
- The correct flue selection is critical for long term service of the flue components. The ESCEA Flexible flue system must be used on all indoor ESCEA gas fires. It has the ability to create complex pathways, with a flue terminal (cowl) on the roof or external wall. With some models the flexible flue can be insulated to allow for longer flexible flue runs.
- Contact ESCEA for advice for complex or non-standard specifications not included in the relevant installation manual. (e.g. under bench, hutch, recessed or joinery installations).
- Some installation arrangements will expose surfaces adjacent to the fireplace, to higher than anticipated levels of heat. Detail material selection to withstand these temperatures for long term durability of materials.
- Make sure open space requirements for the EF5000 outdoor gas fire are met.
- Refer to ESCEA installation information and detail provisions on the drawings.
- This worksection *Template* contains text that may be adapted for use in Design and Construct projects.

The *Normal* style text of this worksection may refer to items as being documented elsewhere in the contract documentation. Make sure they are documented.

Specifying ESD

The following may be specified by retaining default text:

- Energy efficient gas space heating.

Refer to NATSPEC TECHreport TR 01 on specifying ESD.

1 GENERAL

ESCEA is a New Zealand owned and run company that designs fireplaces for a demanding market. Design flexibility is at the heart of the ESCEA philosophy, allowing the Architect, Designer or home owner to meet the design intent within their project. ESCEA fireplaces are known for their smart innovation and beautiful design. An ESCEA fireplace fits just about anywhere inside or outside your home.

1.1 RESPONSIBILITIES**General**

Requirement: Provide ESCEA gas fireplaces, as documented.

Documented is defined in 0171 General requirements as meaning contained in the contract documents.

1.2 COMPANY CONTACTS

ESCEA technical contacts

Website: www.escea.com/au/architectural-advisory.

1.3 CROSS REFERENCES

General

Requirement: Conform to the following:

- 0171 General requirements.

0171 General requirements contains umbrella requirements for all building and services worksections.

List the worksections cross referenced by this worksection. 0171 General requirements references the 018 Common requirements subgroup of worksections. It is not necessary to repeat them here. However, you may also wish to direct the contractor to other worksections where there may be work that is closely associated with this work.

NATSPEC uses generic worksection titles, whether or not there are branded equivalents. If you use a branded worksection, change the cross reference here.

1.4 STANDARDS

General

Gas installations: To AS/NZS 5601.1.

Gas appliances: To AS/NZS 5263.0.

1.5 MANUFACTURER'S DOCUMENTS

Technical manuals

Website: www.escea.com/au/service-and-technical/fireplace-specifications.

Available information: Includes the following:

- Installation and user manuals for DS1150, DS1400, DS1650, DS1900, DL850, DL1100, DF700, DF960, DFS730, EF5000.
- Escea Architectural advisory manual.
- Escea Extended flue run manual.

1.6 SUBMISSIONS

Certification

Requirement: Provide certification of conformance to the following:

- Gas appliances: To AS/NZS 5263.0.
- Gas space heaters: To AS/NZS 5263.1.3.
- Decorative gas log fires: To AS/NZS 5263.1.8.

Copies of the certificates can be downloaded from the ESCEA website.

Installation

Requirement: On completion submit a certificate of compliance for the installation.

Warranties

ESCEA products: On completion submit ESCEA standard product warranty, as follows:

- Firebox: 5 years.
- Other components: 2 years.

Contact ESCEA for details of product warranty conditions. To meet ESCEA product warranty conditions, only ESCEA products are to be used and ESCEA installation recommendations complied with.

2 PRODUCTS

2.1 GENERAL

Product substitution

Other products: Conform to **SUBSTITUTIONS** in 0171 General requirements.

SUBSTITUTIONS in 0171 *General requirements* sets out the submissions required if the contractor proposes alternative products. Refer also to NATSPEC TECHnote GEN 006 for more information on proprietary specification.

Storage and handling

Requirement: Conform to ESCEA recommendations for transport, storage and handling of ESCEA supplied products.

Handling: Handle and store units, cylinders, pipes, fittings and accessories to avoid damage.

Storage: Store on site, under cover on a clean level area, stacked to eliminate movement and away from work in progress. Store according to ESCEA instructions.

Damage: Replace damaged or marked elements.

Cleaning: Remove debris, unused materials and elements from the site.

Product identification

General: Marked to show the following:

- Manufacturer's identification.
- Product brand name.
- Product type.
- Quantity.
- Fireplace serial number.
- Date of manufacture.
- Date of installation.

2.2 ESCEA GAS FIREPLACES

Standards

Gas space heaters: To AS/NZS 5263.1.3.

Decorative gas log fires: AS/NZS 5263.1.8.

General

Type: Thermostatically controlled, high efficiency and high output, room sealed, direct vent, flame effect gas fireplace.

Gas: Natural gas, LPG (propane).

All ESCEA fireplaces operate on natural gas or propane.

Control: Provide the following thermostatic control, as documented:

- ESCEA RF remote control.

Supplied as standard.

- Ethernet cable connection to a home or building router.
- Direct cable connection to a home automation system.

Controls may be documented in the **ESCEA gas fireplace schedule**. Available control options depend on the ESCEA model being used.

Requirement: To the **ESCEA gas fireplace schedule**.

2.3 INDOOR GAS FIREPLACES

Delete any models from list below that are not being used on the project.

ESCEA DS series gas fireplaces

Requirement: Provide ESCEA DS series indoor gas fireplaces, as documented.

Description: A thermostatically controlled, flame effect, high efficiency and high output gas fire. Fire is controlled by a RF wireless remote control handset, or by connection and control through the internet via the home Wi-Fi and Smart Heat app. Fireplace can also be connected to a home automation system.

Selection and options may be documented in the **ESCEA gas fireplace schedule**.

Refer to ESCEA for detailed product descriptions and installation drawings. The DS series employ a powered, direct vent flue system that gives the option of terminating the flue either through the roof or on a vertical wall. Flue can be run under the floor.

Style: Built-in, glass-fronted, room sealed, direct vent fireplace.

Arrangement: Single or double-sided, as documented.

ESCEA DL series gas fireplaces

Requirement: Provide ESCEA DL series indoor gas fireplaces, as documented.

Description: A powered direct vent flued, thermostatically controlled, flame effect, high efficiency and high output gas fire. Fire is controlled by a RF wireless remote control handset, or by connection and control through the internet via the home Wi-Fi and Smart Heat app. Fireplace can also be connected to a home automation system.

Selection and options may be documented in the **ESCEA gas fireplace schedule**.

Refer to ESCEA for detailed product descriptions and installation drawings. The DL series employ a powered, direct vent flue system that gives the option of terminating the flue either through the roof or on a vertical wall. Flue can be run under the floor. This a high output fire with a smaller cassette-style firebox.

Style: Glass-fronted, room sealed, direct vent fireplace. Cassette style. Can be built into a masonry cavity or a false chimney cavity.

ESCEA DF series gas fireplaces

Requirement: Provide ESCEA DF series indoor gas fireplaces, as documented.

Description: A powered direct vent flued, thermostatically controlled, flame effect, high efficiency and high output gas fire. Fire is controlled by a RF wireless remote control handset, or by connection and control through the internet via the home Wi-Fi and Smart Heat app. Fireplace can also be connected to a home automation system.

Selection and options may be documented in the **ESCEA gas fireplace schedule**.

Refer to ESCEA for detailed product descriptions and installation drawings. The DF series employ a powered, direct vent flue system that gives the option of terminating the flue either through the roof or on a vertical wall. Flue can be run under the floor. The DF series can be fitted inside most Australasian brick fireplaces. Ideal for smaller rooms or retrofit applications.

Style: Glass-fronted, room sealed, direct vent fireplace. Cassette style. Can be built into a masonry cavity or a false chimney cavity.

ESCEA DFS730 freestanding gas fireplace

Requirement: Provide ESCEA DFS730 freestanding indoor gas fireplace, as documented.

Description: A powered direct vent flued, thermostatically controlled, flame effect, high efficiency and high output gas fire in a curved and painted steel body. Fire is controlled by a RF wireless remote control handset, or by connection and control through the internet via the home Wi-Fi and Smart Heat app. Fireplace can also be connected to a home automation system.

Selection and options may be documented in the **ESCEA gas fireplace schedule**.

Refer to ESCEA for detailed product descriptions and installation drawings. The DFS730 employs a powered flue system in vertical or horizontal termination.

Style: Freestanding, glass-fronted, room sealed, direct vent fireplace.

The ESCEA DFS730 is designed as a replacement for wood heaters or for situations where a built-in heater is not feasible or not desired.

MODE KS series gas fireplaces

Requirement: Provide MODE KS series indoor gas fireplaces, as documented.

Description: A premium gas fire with unconventional shapes. A thermostatically controlled, flame effect, high efficiency and high output gas fire. Fire is controlled by a RF wireless remote control handset, or by connection and control through the internet via the home Wi-Fi and Smart Heat app. Fireplace can also be connected to a home automation system.

Selection and options may be documented in the **ESCEA gas fireplace schedule**.

Refer to ESCEA for detailed product descriptions and installation drawings. The KS series employ a powered, direct vent flue system that gives the option of terminating the flue either through the roof or on a vertical wall. Flue can be run under the floor.

Style: Built-in, glass-fronted, room sealed, direct vent fireplace.

Arrangement: Left and right corner, single-sided, double-sided or three-sided peninsula, as documented.

Fuel bed

Requirement: Provide each fireplace with a fuel bed, as documented.

Options include, crystalight, gems, rocks, coals and logs. Not all options are available for all models. Document selection in the **ESCEA gas fireplace schedule**.

2.4 OUTDOOR GAS FIREPLACES

ESCEA EF5000 gas fireplace

Requirement: Provide ESCEA EF5000 outdoor gas fireplace, as documented.

Description: A high output, flame effect gas fire designed for outdoor use only. Manufactured from stainless steel and requiring no flue. The fire is ignited by touch pad electronic control. For permanent installation into a wall cavity or optional kitset wall enclosure.

Selection and options may be documented in the **ESCEA gas fireplace schedule**.

Style: Built-in open-fronted gas fire.

Outdoor kitset enclosure for EF5000

Enclosure: Provide ESCEA supplied ready to build freestanding steel enclosure for the ESCEA EF5000 only. Supplied to suit light-weight to medium-weight claddings or finishes.

Can be used when there is not a suitable structure to build into. 1200mm H x 1800mm W x 600mm D. Delete if not required.

2.5 FLUES

General

Requirement: Provide ESCEA standard flue kits, as documented.

Selection and options may be documented in the **ESCEA gas fireplace schedule**.

ESCEA supply options for different terminal installation requirements. Refer to ESCEA for installation ideas. ESCEA recommends a specific flue for each flued ESCEA appliance and its selected location. Options include:

- Internal vertical powered flue kit (vertical flue installation where powered flue fan unit is being installed internally e.g. ceiling, attic).
- External vertical powered flue kit (vertical flue installation where powered flue unit is installed outside the building (on the roof) due to no space in the ceiling or wall cavity).
- Horizontal powered flue kit for wall-mounted external installation.
- Masonry vertical powered flue kit (for fully enclosed masonry, or sealed timber-framed, 'mock' chimney installation).
- Freestanding external vertical powered flue kit (flue seen within the room and powered flue unit is installed outside the building). For use with the DFS730.
- Freestanding internal vertical powered flue kit (flue is seen within the room and powered flue unit is installed within the ceiling space). For use with the DFS730.
- Freestanding horizontal powered flue kit (flue is seen within the room but will exit out the wall). For use with the DFS730.

Flashings to cladding penetration or top of chimney structure do not form part of the flue kit and must be specified separately. Document flashing requirements for installation by contractor.

2.6 SMART HEAT SYSTEM

General

Requirement: Provide ESCEA Smart Heat system, as documented, to connect each fireplace directly to a modem.

When connected, download the Android or iOS app to control fireplace's precise settings and temperature. Alternately log onto Smart Heat website to view fire settings.

Available for DS1150, DS1400, DS1650, DS1900, DL850, DL1100, DF700, DF960 and DFS730 models. Delete if not required.

2.7 ALUMINIUM FLEXIBLE FLUE EXTENSION

General

Requirement: If the flue length exceeds 4 m, provide ESCEA Flexible Flue 4 m extension kit to extend the flexible flue length beyond the initial 4 m.

Kit: 80 mm Ø inlet pipe and 110 mm Ø exhaust pipe, Powerflue electrical cable, joiners and clamps.

Bends: Do not exceed ten bends in any total flexible flue length.

Flexible Flue extension kit is only for use on selected D-Series ESCEA fires, to extend the flexible flue run without the need for a condensate trap.

Available for DF700 and DF960 models with the following flue options:

- Insulated flue runs up to 12 m.

Available for DS1150, DS1400, DS1650 and DS1900 and KS models with the following flue options:

- Uninsulated flue runs up to 8 m.

- Insulated flue runs up to approximately 20 m.
- Delete if not required.

2.8 INSULATED FLEXIBLE FLUE EXTENSION

General

Additional insulation: If the total flue run exceeds the minimum standard length for a particular model, extend the flexible flue by insulating the 110 mm diameter exhaust pipe for its entire length.

This will push out the condensate formation point further allowing for a fully flexible run without the need for a condensate trap.

Insulation: Provide insulation with an operating temperature $\geq 230^{\circ}\text{C}$ and R-Value $\geq 1.45 \text{ m}^2.\text{K/W}$.

Bends: Do not exceed ten bends in any total flexible flue length.

The initial Powerflue kit is combined with multiples of Flexible Flue 4 m Extension Kits (904605) to the overall flue length.

Available for DF700 and DF960 models with the following flue options:

- Insulated flue runs up to 12 m.

DS1150, DS1400, DS1650, DS1900 and KS models with the following flue options:

- Insulated flue runs up to approximately 20 m.

Beyond the insulated flexible flue length, transition to the Poly Pro Extended Flue Run Kits up to 40 m for all models mentioned above.

Delete if not required.

2.9 POLY PRO FLUE EXTENSION

General

Requirement: Provide ESCEA polypropylene flue consisting of a rigid pipe, co-linear push fit flue system with an 80 mm \varnothing inlet pipe and a 110 mm \varnothing exhaust pipe.

The polypropylene flue system is for use on selected D-Series ESCEA fires, as an add-on to the initial 4 m of aluminium flexi flue, and allows flue runs up to 12 m or 40 m depending on the model selected. Includes condensate trap.

Installation: Conform to the following:

- Bends: Maximum of four bends in polypropylene flue (either 45° or 90°).
- Support: Support the flue at one metre intervals.
- Trap: Install the waterless valve/condensate trap in a vertical position.

Available for DF700 and DF960 models with the following flue options:

- Uninsulated flue runs from 4 m and up to 40 m.
- Insulated flue runs from 12 m up to 40 m.

Available for DFS730, DL850 and DL1100 models with the following flue options:

- Flue runs from 4 m and up to 12 m.

Available for DS1150, DS1400, DS1650 and DS1900 and KS models with the following flue options:

- Uninsulated flue runs beyond 8 m and up to 40 m.
- Insulated flue runs from 20 m up to 40 m.

Delete if not required.

2.10 DS SERIES EXTENDED TRIM KIT

General

Requirement: Provide ESCEA extended trim to replace the factory set trim around the glass viewing area for the DS series fire, as documented, to allow for heat sensitive/non-combustible linings and substrates deeper than 14 mm, up to 22 mm in depth.

Available for DS1150, DS1400, DS1650 and DS1900 models. Two kits will be required for a double sided fire. Delete is not required.

2.11 HEAT FLOW ADJUSTER

General

Requirement: Provide ESCEA heat flow adjustor accessory for double sided DS series gas fire installations, as documented, to allow heat flow to be adjusted and fixed where the fire is expelling heated air into two rooms of different sizes.

Available for DS1150, DS1400, DS1650 and DS1900 models. Delete if not required.

3 EXECUTION

3.1 INSTALLATION

ESCEA fireplaces

Requirement: Install to ESCEA recommendations, documented in the relevant model installation manual.

Installation manuals can be downloaded from the relevant model page on the ESCEA website.

Fuel bed: Install within fireplace to ESCEA recommendations, documented in the relevant model installation manual.

Flues

Requirement: Provide ESCEA supplied standard flues and flue terminations and install to ESCEA recommendations, documented in the relevant model installation manual.

Flue extension: Install ESCEA uninsulated or insulated flexible flue extension kit in conjunction with the standard ESCEA powerflue kit, to ESCEA's documented installation requirements. Install using included clamped connections and joiners.

Available for DF700, DF960, DS1150, DS1400, DS1650, DS1900. Delete if not required

Flue extension type: Provide uninsulated or insulated flue extension kit to ESCEA's recommendations.

Insulation requirements are dependent on the model selected and total length of flexible flue required.

Powerflue: Connect directly to appliance using supplied power cable.

Flexible aluminium flues: Install to AS 4254.1. Do not re-bend flues once bent.

Repeatedly re-bending corrugated aluminium flues can cause them to crack and leak condensate and flue gases.

Polypropylene flue extension

Only for use with ESCEA D series gas fireplaces.

Requirement: If the flue installation exceeds ESCEA's maximum recommended length for flexible flue, provide ESCEA poly pro flue extension.

Installation: Install ESCEA poly pro extended flue kit, including mandatory condensate control, to ESCEA's documented installation requirements and extended flue run manual.

Available for DF700, DF960, DFS730, DL850, DL1100, DS1150, DS1400, DS1650 and DS1900 models. Delete if not required.

Type: Rigid polypropylene co-linear push fit flue system with a DN80 inlet pipe and DN100 exhaust pipe.

Installation: Install to ESCEA recommendations, documented in the relevant model installation manual.

Falls: Arrange flues so that condensate drains continuously back to the appliance and without pockets where condensate may accumulate.

Minimum fall: 20 mm/m.

Condensate drains

Material: ESCEA supplied polypropylene pipe.

3.2 TESTING

0171 General requirements defines different tests in **INTERPRETATION**, **Definitions** and calls for an inspection and testing plan in **TESTING - GENERALLY**, **Inspection and testing plan**.

Completion tests

Requirement: On completion of the installation, provide the following:

- ESCEA recommended tests.
- Statutory tests.

3.3 COMPLETION

Operations and maintenance manual

Requirement: Provide ESCEA operation and maintenance manual and ESCEA gas fire user guide.

These should be provided on completion of installation and testing.

Certification

Requirement: Upon completion, provide evidence of the following:

- Conformance to Network Utility Operator and statutory requirements.

To include leakage testing.

- Certificate of Compliance (CoC) and a Gas Safety Certificate (GSC).

Warranties

Requirement: Provide ESCEA standard product warranty on completion.

3.4 MAINTENANCE

Annual maintenance

Requirement: Provide ESCEA recommended annual maintenance to the requirements of the respective ESCEA installation manual.

4 SELECTIONS

Schedules are a tool to specify properties required for products or systems. If the principal permits documentation of the product or system by proprietary name, some of the properties may be unnecessary and can be deleted. Document the product or system's location or application here and/or on the drawings with a matching project code. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

4.1 GAS FIREPLACES

ESCEA gas fireplace schedule

	A	B	C
Location			
Model series and model number			
Heat output (kW)			
Corresponding gas input (MJ/h)			
Gas type			
Star rating			
Single/double/three sided or corner			
Fuel bed			
Fascia style			
Standard flue kit selection			
Flexi-flue extension kit required			
Insulated flexi-flue extension kit required			
Poly-pro flue extension kit required			
Ethernet connection			
Home automation			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Location: Appliance location. e.g. Living room. Make sure the location matches the model type (indoor versus outdoor).

Gas type: e.g. Natural, LPG (propane).

Single/double sided: e.g. Single-sided, Double-sided. Default is single sided.

Fuel bed: Nominate selection based on the following:

- Fuel Bed DS: Woodland Selection, Logs, White Coals (large), Black Coals (large), New Zealand River Rock (small), Crystalight in two colours – Black or White with the option of driftwood to sit on top of the Crystalight.
- Fuel Bed DL: Ceramic logs, White Coals (large), Black Coals (large), New Zealand River Rock (small), Crystalight in two colours – Black or White with the option of driftwood to sit on top of the Crystalight.
- Fuel Bed DF and DFS730: Ceramic logs, New Zealand River Rock, Black Coals (small).
- Fuel Bed Mode KS: Whiskey Gem, Onyx Gem, Pearl gem, New Zealand River Rock, White Coals, Black Coals, Redwood Elevation, Logs, Woodland Selection.
- Fuel bed EF5000: Black Coals (large) with glass beads kit, White Coals (large) and river pebble kit, New Zealand River Rock.

Fascia style: Nominate selection based on the following:

- Fascia Style DS: Frameless, Linear Trim, Bevelled - Can be installed without a fascia (frameless).
- Fascia Style DL: Bevelled, Inset, Squared Lite.
- Fascia Style DF: Slim, Stretch, Edge (DF700 and 960 only).
- Fascia Colour: Titanium Silver, Volcanic Black, or Stainless Steel (DF stretch and slim fascia only, EF5000 Fascia only).

Standard flue kit selection: Wall (Horizontal Powerflue Kit) or Roof (Internal Vertical or External Vertical Powerflue kit).

Flexi-flue extension kit required: Required / Not required. (only for use with Mode KS Series, DS Series and DF Series Fires).

Insulated flexi-flue extension kit required: Required / Not required. (only for use with Mode KS Series, DS Series and DF Series Fires).

Poly-pro flue extension kit required: Required / Not required.

Ethernet connection: Required/Not required.

Home automation: Required/Not required.

REFERENCED DOCUMENTS

The following documents are incorporated into this worksection by reference:

AS 4254		Ductwork for air-handling systems in buildings
AS 4254.1	2021	Flexible duct
AS/NZS 5263		Gas appliances
AS/NZS 5263.0	2017	General requirements
AS/NZS 5263.1.3	2021	Gas space heating appliances
AS/NZS 5263.1.8	2021	Decorative effect gas appliances
AS/NZS 5601		Gas installations
AS/NZS 5601.1	2013	General installations

The following documents are mentioned only in the *Guidance* text:

NATSPEC GEN 006	2015	Product specifying and substitution
NATSPEC GEN 024	2021	Using NATSPEC selections schedules
NATSPEC TR 01	2021	Specifying ESD