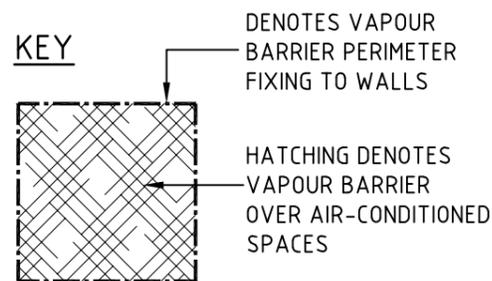


TYPICAL CEILING PLAN



DESIGN INTENT:

THE INTENDED PURPOSE OF THE VAPOUR BARRIER - GENERIC DETAILS ARE TO PROVIDE A GUIDE FOR DESIGNERS, CONSTRUCTION AND PROJECT MANAGERS TO ENSURE THE DESIGN AND INSTALLATION OF VAPOUR BARRIERS COMPLIES WITH THE REQUIRED PERFORMANCE CRITERIA OF VAPOUR BARRIERS FOR NORTHERN TERRITORY GOVERNMENT BUILDINGS IN ZONE 1 CLIMATES.

IN THE NORTHERN TERRITORY ZONE 1 CONSISTS GENERALLY OF ALL AREAS NORTH OF THE 18° PARALLEL. REFER TO THE NCC (BCA): CLIMATE ZONES FOR THERMAL DESIGN - FIGURE A1.1 IN VOLUME 1.

AIR CONDITIONED BUILDINGS IN ZONE 1 (TROPICAL) CLIMATES ARE REQUIRED TO HAVE AN EFFECTIVE VAPOUR BARRIER ON THE HOT SIDES OF A STRUCTURE (EXTERNAL OR INTERNAL UNCONDITIONED SPACES) TO PREVENT VAPOUR AND OUTSIDE AIR TRANSMISSION INTO COLD SIDES OF BUILDINGS (INTERNAL AIR-CONDITIONED SPACES) RESULTING IN THE FORMING OF CONDENSATION ON THE COOLER SURFACES. CONDENSATION OF THIS NATURE IS KNOWN TO HAVE CAUSED EXTENSIVE ROOFING AND CEILING FAILURES IN NORTHERN TERRITORY GOVERNMENT BUILDINGS.

GENERAL REQUIREMENTS:

1. MATERIALS AND INSTALLATION:

LAYER 1 - SAFETY MESH - 300mm x 150mm GRID OF 2mm DIAMETER GALVANISED WIRE.
INSTALL SAFETY MESH TO UNDERSIDE OF ROOF INSULATION / VAPOUR BARRIER IN ACCORDANCE WITH AS/NZS4389 AND THE RELEVANT WORK HEALTH & SAFETY REGULATIONS.

LAYER 2 - GLASS WOOL ROOF INSULATION: R1.8 RATED (NOM. 80mm THICK) INSULATION BLANKET WITH BONDED PERFORATED REFLECTIVE FOIL LAMINATE FACING - PROPRIETARY ITEM: BRADFORD ANTICON BLANKET WITH BONDED PERFORATED FACING OR EQUAL ALTERNATIVE. FLETCHER PERMASTOP WITH BONDED REFLECTIVE FOIL.
LAY GLASS WOOL INSULATION BLANKETS, BONDED FACE DOWN, CONTINUOUSLY OVER THE TOP OF THE PURLINS AND THE SAFETY MESH.

LAYER 3 - VAPOUR BARRIER - PROPRIETARY ITEM: BRADFORD THERMOFOIL 753 HEAVY DUTY & HIGH CLASSIFICATION OR EQUAL ALTERNATIVE.
LAY VAPOUR BARRIER PARALLEL TO ROOF PURLINS. LAP VAPOUR BARRIER OVER ROOF PURLINS, MINIMUM 150mm, AND FULLY SEAL LAPS WITH APPROVED TAPE AND ELASTOMERIC SEALANT, BRING VAPOUR BARRIER TO EXTERNAL WALLS (HOT SIDE) AND FASTEN.
IN FRAMED WALL CONSTRUCTION ENSURE THE FOIL OF THE ROOF VAPOUR BARRIER IS LAPPED AND SEALED OVER THE WALL VAPOUR BARRIER / INSULATION, LAP AND SEAL JOINTS IN WALL VAPOUR BARRIER AS PER ROOF VAPOUR BARRIER.
IN TIMBER DECKED FLOOR CONSTRUCTION INSTALL VAPOUR BARRIER OVER JOISTS, ENSURE THE FOIL OF THE FLOOR VAPOUR BARRIER IS LAPPED AND SEALED OVER THE WALL VAPOUR BARRIER / INSULATION LAP AND SEAL JOINTS IN FLOOR VAPOUR BARRIER AS PER ROOF VAPOUR BARRIER.

LAYER 4 - SARKING REFLECTIVE FOIL LAMINATE (TYPICAL).
LAY SARKING OVER EAVES, VERANDAHS AND NON AIR-CONDITIONED INTERNAL SPACES.
LAP SARKING WITH VAPOUR BARRIER AND FULLY SEAL, TERMINATE OTHER END TO ROOF OVERHANG.

LAYER 5 - GLASS WOOL WALL INSULATION: R2.0 RATED INSULATION BATTS FITTED TIGHTLY BETWEEN FRAMING MEMBERS.

2. VAPOUR BARRIER PENETRATIONS:

ALL PENETRATIONS THROUGH THE VAPOUR BARRIER TO BE FULLY SEALED AND MECHANICALLY FIXED.

3. VAPOUR BARRIER TERMINATIONS:

ALL VAPOUR BARRIER TERMINATIONS TO WALLS TO BE ON THE 'HOT SIDE' OF THE STRUCTURE - BRING TO HOT SIDE OF WALL AND FASTEN (FOR BOTH EXTERNAL OR INTERNAL NON AIR-CONDITIONED SPACES). TERMINATIONS TO BE FULLY SEALED AND MECHANICALLY FIXED.

4. INSULATION UNDERLAY:

WHERE ROOF INSULATION IS SUPPLIED WITHOUT A BONDED FACING - A SEPARATE PERFORATED (PERMEABLE) UNDERLAY TO BE PROVIDED TO UNDERSIDE OF THE ROOF INSULATION. FIX UNDERLAY SECURELY OVER SAFETY MESH TO PREVENT MOVEMENT. PROPRIETARY ITEM: BRADFORD THERMOSEAL PERFORATED HEAVY DUTY FOIL OR EQUAL ALTERNATIVE. FLETCHER INSULATION WITH PERFORATED REFLECTIVE FOIL.

IMPORTANT NOTE:

DETAILS AS SHOWN ARE GENERIC AND ARE INTENDED TO BE USED AS A GUIDE ONLY - REFER DESIGN INTENT ON THIS DRAWING.
DESIGN CONSULTANTS TO ADAPT DETAILS TO SUIT EACH PROJECT AS REQUIRED.

DRAWN	SG	CHECKED	-
DATE	NOV. 2016	DATE	-
DESIGNED	SG	CHECKED	-
DATE	NOV. 2016	DATE	-
DESIGN PROJECT LEADER	-	NTG PROJECT MANAGER	MT
DATE	-	DATE	-



DARWIN - VARIOUS REGIONS
VAPOUR BARRIERS - GENERIC DETAILS

TYPICAL CEILING PLAN AND NOTES

No.	DESCRIPTION	DATE	INIT.	DEPT./COMPANY.
2	REVISED ISSUE	20-11-16	SG	DIPL
1	1st ISSUE	03-03-15	KMB	DoI

NTG PROJECT No.	NTG ASSET No.	SHEET No.	NTG DRAWING No.	AMENDMENT	SHEET SIZE
		1 OF 1	B15-2501	2	A3