



Fit-up Standards: Technical Reference Manual



Message from the Deputy Minister

A New Approach to PWGSC Office Fit-ups

This *Technical Reference Manual* details an important change of approach to the way PWGSC prepares general-purpose office accommodation for occupancy by our customer departments and agencies across Canada.

Accommodation is the federal government's second highest administrative cost, next only to employee compensation. In keeping with the government's commitment to standardize products, streamline processes, improve the way it delivers services, and make the best use of taxpayers' money, we have re-evaluated our approach to fit-up. Our objective is to provide office accommodation of a consistently high standard across all federal departments and agencies, in all regions of the country, while helping the Government of Canada achieve its other objectives.

What has emerged is a clearer set of fit-up standards – accompanied by a firm commitment to apply the standards more rigorously. Although fit-up standards have been in place for many years, PWGSC has often been called on to accept and fund fit-up components that do not comply with the standards. What is significantly different in the approach launched on June 1st, 2004, is that PWGSC will now fund only fit-up components that adhere to our explicit, quality-based standards. PWGSC cannot fund fit-up components that go beyond the Government of Canada standard.

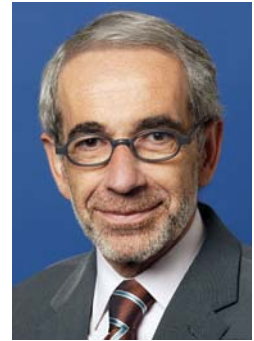
It is important to remember that, as always, it's our job to fully understand what each customer department and agency requires. Our purpose is to help make our customers successful. We're backed up by a whole team of professionals – not only in providing fit-up services, but also in acquiring suitable accommodation, satisfying IT requirements, and meeting the many other needs that go into the creation of productive work space.

We see many benefits in the renewal of the fit-up standards for our customers and PWGSC alike: more timely fit-ups, predictable costs, clearer procedures and accountabilities – all resulting in a Government of Canada brand of quality office space that will support public servants fully in delivering services for Canadians.

Your understanding and cooperation in implementing this important initiative as intended is essential to its success.

Best regards,

I. David Marshall
Deputy Minister, PWGSC



I. David Marshall
Deputy Minister
Public Works and
Government Services
Canada

Table of Contents

OVERVIEW

About this Document

SECTION A: GENERAL-PURPOSE OFFICE SPACE

TAB A1. INTRODUCTION

A1.1 Background/Context

A1.2 Application

TAB A2. APPROVALS AND GOVERNANCE

A2.1 Compliance with the Fit-up Standards

A2.2 Compliance Monitoring

A2.3 Process for Approval of Non-compliance

A2.4 Requirements for Submissions to the ADM RPB

A2.5 Criteria for Evaluating Requests for Non-Compliance

A2.6 Non-compliance Trends and Reporting

TAB A3. STANDARDS

A3.1 Overview

A3.2 Fit-up Components and Funding Accountabilities

A3.3 Office and Support Space Allocations

A3.4 Standards for Furniture Panels/Screens

TAB A4. SPECIAL TECHNICAL STANDARDS

A4.1 Telecommunications

A4.2 Special Fire Protection Standards for Customer-funded Requirements/SPS

TAB A5. PLANNING

A5.1 Planning and Design

A5.2 Sample Plans

TAB A6. SAMPLE DETAIL DRAWINGS

A6.1 Workstations and Offices

A6.2 Support Spaces

A6.3 Doors and Glazing

TAB A7. FINISHES*A7.1 Overview**A7.2 Examples***TAB A8. COSTING***A8.1 Fit-up Cost Limits**A8.2 Source of Funds for Non-compliant Fit-up Components**A8.3 Cost Estimates**A8.4 Additional Direct and Indirect Costs**A8.5 Project Delivery Cost Controls***TAB A9. FORMS AND TEMPLATES***A9.1 Fit-up Cost Estimate Template**A9.2 PWGSC Occupancy Phase Cost Estimate**A9.3 Fit-up Compliance Monitoring Form***SECTION B: MINISTERIAL AND DEPUTY MINISTERIAL
ACCOMMODATION****TAB B1. INTRODUCTION****SECTION C: SECURE ADMINISTRATIVE AND QUASI-JUDICIAL
ACCOMMODATION****TAB C1. INTRODUCTION****RESOURCES****TAB R1. GLOSSARY****TAB R2. OFFICE ASSIGNMENT TABLE**

List of Figures

Figure	See Section
Process for Approval of Non-Compliance	A2.3
Sample Plan (PL1): 324 m ² space	A5.2
Sample Plan (PL2): 961 m ² space	A5.2
Sample Plan (PL3): 1336 m ² space	A5.2
Sample Plan (PL4): 2878 m ² space	A5.2
Detail Drawing: 5.9 m ² Workstation Layout	A6.1
Detail Drawing: 5.9 m ² Workstation Layout (cluster)	A6.1
Detail Drawing: 7.4 m ² Workstation Layout	A6.1
Detail Drawing: 7.4 m ² Workstation Layout (cluster)	A6.1
Detail Drawing: 14 m ² Office Layout – Senior Departmental Representative	A6.1
Detail Drawing: 18.5 m ² Office Layout – Director	A6.1
Detail Drawing: 18.5 m ² Office Layout (alternate) – Director.....	A6.1
Detail Drawing: 23 m ² Office Layout – Director General	A6.1
Detail Drawing: 23 m ² Office Layout (alternate) – Director General	A6.1
Detail Drawing: 28 m ² Office Layout – Assistant Deputy Minister A6.1	A6.1
Detail Drawing: 28 m ² Office Layout (alternate) – Assistant Deputy Minister.....	A6.1
Detail Drawing: 14 m ² Small Meeting Room	A6.2
Detail Drawing: 14 m ² Small Meeting Room (reflected ceiling)	A6.2
Detail Drawing: 30 m ² Medium Meeting Room	A6.2
Detail Drawing: 30 m ² Medium Meeting Room (reflected ceiling) A6.2	A6.2
Detail Drawing: 68.8 m ² Large Meeting Room	A6.2
Detail Drawing: 68.8 m ² Large Meeting Room (reflected ceiling)..	A6.2
Detail Drawing: 5 m ² Quiet/Touchdown Room	A6.2
Detail Drawing: Typical Kitchenette Millwork (elevation)	A6.2
Detail Drawing: Typical Shared Equipment Area Millwork	A6.2
(elevation)	
Detail Drawing: Typical Door with Sidelight	A6.3
Detail Drawing: Typical Door with Glazing	A6.3
Detail Drawing: Typical Door with Double Sidelight	A6.3
Detail Drawing: Typical Door with Clerestory	A6.3
Finishes: Example 1	A7.2
Finishes: Example 2	A7.2
Finishes: Example 3	A7.2
Finishes: Example 4	A7.2



Overview



About this Document

The *Fit-up Standards: Technical Reference Manual* is a resource for staff involved in the fit-up of office space for departments and agencies throughout the federal government. Its purpose is to:

- review the circumstances surrounding the development of the renewed fit-up standards;
- identify the standards and provide examples to assist implementation;
- clarify funding accountabilities;
- explain PWGSC's approach to approvals and governance.

The renewed standards have been prepared by a PWGSC task group as part of a wider PWGSC initiative launched in 2002 to review and renew key departmental functions. The Fit-up Standards have been reviewed and approved by the PWGSC Management Committee and are supported by Treasury Board real property officials.

A companion document, entitled *The Way Forward: Fit-up Standards*, has been prepared as an overview and a reference resource for real property managers and staff in customer departments and agencies.

How To Use This Manual

When you read this manual for the first time, it is recommended that you begin with a thorough review of:

- A1 "Introduction" – highlights the main differences from past practices, and provides a grounding in the context for the renewed standards and how the standards will be applied; and
- R1 "Glossary" – defines the key terms.

The remainder of the manual provides reference materials that will help you to apply the standards when fitting up new space, fitting up an existing space for reuse by a different federal organization, or making alterations to existing space as a tenant service.

Note: We support 'green practices' and are attempting to keep the paper copies of this manual to a minimum. We, therefore, encourage you to refer to the electronic version of this document, which will be updated periodically on the Fit-up Standards Web site (http://www.pwgsc.gc.ca/realproperty/text/pubs_fitup/toc_e.html). Please check frequently for revised or updated information.



SECTION A: General-purpose Office Space





TAB A1. Introduction



A1.1 Background/Context

PWGSC's Real Property Branch is mandated to provide affordable and sustainable office accommodation and related services for federal government departments and agencies. These services include the fit-up of office space to meet customer department program requirements within the limits of the Fit-up Standards.

Fit-ups, which represent a significant portion of PWGSC Real Property business, include the preparation of accommodation for initial federal occupancy, and the alteration of existing space for reuse by a different customer department or agency.

The Need For Change

PWGSC's approach to fit-ups is guided by PWGSC's *Framework for Office Accommodation and Accommodation Services*. The *Framework*, introduced in 1996, includes, among other key elements, an accommodation policy, and generic fit-up standards. The primary messages of the *Framework* are:

- Customer departments/agencies and PWGSC share responsibility for developing and applying standards for the quantity and quality of office accommodation.
- PWGSC is funded to provide office accommodation to customer departments only to the level of the generic standards. Anything over and above these standards must be funded by the customer.

In a 2002 review of accommodation management practices in PWGSC, the Office of the Auditor General and the Standing Committee on Public Accounts pointed out critical weaknesses in PWGSC's service delivery and in the understanding and application of the *Framework for Office Accommodation and Accommodation Services*. In particular, the concept of shared accountability, coupled with a focus on customer service, made it difficult to implement the generic standards consistently and equitably across government, and often made it difficult to deliver projects on time and on budget.

The findings, coupled with Expenditure Management Review, resulted in the launch of a number of Real Property Renewal initiatives, including the internal review of the fit-up standards for the purpose of finding options for strengthening the delivery of fit-up projects. A multi-disciplinary team was formed and studies were undertaken to address the many issues related to fit-up such as standards, costs and funding accountabilities.

A1. Introduction

Background/Context

Due to time constraints that had been established for achieving results, policy change and extensive consultations with other departments and agencies were not viable options. Instead, the team consulted with PWGSC Service Integration Team Directors and National Accommodation Managers to identify and anticipate customer concerns with a standards approach to fit-up, and to gather information on size, plans and details for office environments of various departments.

These analyses have resulted in clearer and more detailed fit-up standards for all general-purpose office accommodation and the development of tools to facilitate consistent application.

What's New

The Fit-up Standards elaborate on, rather than replace, the generic standards of the *Framework for Office Accommodation and Accommodation Services*. They specify a midrange quality for construction components and finishes that are considered to be part of a typical fit-up for general-purpose office space. This is often referred to as the standard “bundle of goods” that is delivered by PWGSC on all fit-up projects regardless of location or customer.

The standard is quality, not cost based. In other words, the same “bundle of goods” is delivered on fit-up projects across the country, regardless of any regional cost variances. The fit-up components and finishes incorporate the fundamental aspects of a modern, environmentally sustainable and supportive work environment.

In addition, controls have been incorporated into the process for delivering fit-up projects to help constrain costs and avoid delays to the project schedule. This includes the introduction of a “two revision rule” which limits the number of revisions a customer may request per design stage. (For more information on project controls, refer to chapter A8.5.)

Standardization of fit-up projects and components is intended to:

- achieve cost-effective and timely delivery of accommodation and accommodation services;
- clearly define accountabilities;
- improve understanding of PWGSC's real property program;
- ensure equity and consistency in federal accommodation thereby facilitating relocations;
- incorporate the fundamental aspects of environmental sustainability and supportive work environments; and

A1. Introduction

Background/Context

- demonstrate value to Canadian citizens through improved management of federal accommodation.

Implementation

During a transition period commencing June 1, 2004, and lasting approximately nine months, the standards and enabling tools were communicated broadly to PWGSC Real Property employees and customer departments and agencies. The Fit-up Standards were formally announced by the ADM Service Integration Branch and the ADM Real Property Branch in a memorandum to PWGSC employees dated December 9, 2004, and in a letter to customer departments dated December 10, 2004.

Effective Date

The effective date of the Fit-up Standards is January 1, 2005.

All projects must be examined for compliance with the standards regardless of what stage or phase they were at when the standards came into effect. If a project has advanced to the Implementation Phase but has not yet been tendered, an analysis should be done to determine if redesign and/or revision to working drawings is the most practical way to proceed. If a project has been tendered, it may be appropriate to issue an addendum or negotiate a change to the construction contract if there is an opportunity to avoid unnecessary expense.

Consideration should not only include the initial cost implications of the rework but also the long-term impact of proceeding with a non-compliant solution. For example, could the decision to proceed without change be precedent setting for a multiphase project?

The project team should determine the best course of action and ensure the decision is defensible and well documented.

A1. Introduction

Background/Context

A1.2 Application

It is important to remember that the standardization of fit-up projects will contribute to cost savings for other Government of Canada priorities and, as such, is supported at the highest levels within government. Amongst the significant benefits for all stakeholders, the standards will result in an affordable “common look-and-feel” for federal accommodations and a consistent quality of work environment for federal employees.

The Fit-up Standards apply to:

- general-administrative and public contact office accommodation under the administration and control of PWGSC as provided to all federal departments and agencies, whether reimbursing or non-reimbursing. To the extent possible, the Fit-up Standards also apply, in spirit and intent, to quasi-judicial and secure administrative office accommodation and to special purpose space (SPS), although it is recognized that these space types often have special technical requirements. (Note: quasi-judicial office space, secure administrative office space and SPS are funded to the fit-up cost limit only);
- alterations and/or improvements to the above-noted accommodation including:
 - fit-up for initial occupancy;
 - tenant service work requested and funded by the customer. Tenant service work shall NOT result in a quality of office accommodation higher than that permitted by the Fit-up Standards;
 - fit-up of existing space for reuse by a different PWGSC customer. The scope of this fit-up shall take into account the functional requirements of the customer, existing conditions of the previously occupied space, and the duration of the occupancy.

If occupancy by the same customer continues after renewal of an Occupancy Instrument or lease, fit-up activities will not be undertaken to meet changes to the customer’s operational requirements. However, finishes may be replaced (carpet, screen fabric) or repaired (painted surfaces) at PWGSC cost if required by normal wear and tear – generally after a period of 10 to 12 years.

A1. Introduction

Application

Although the Fit-up Standards do NOT apply to real property under the administration of Crown corporations or other custodial departments, where PWGSC provides services to other custodians, PWGSC shall promote and recommend the application of the standards.

A1. Introduction

Application



TAB A2. Approvals and Governance



A2.1 Compliance with the Fit-up Standards

There should be no deviation from the Standards on any general-purpose office fit-up and it is both the customer's and PWGSC's responsibility to work towards this goal. The Fit-up Standards are supported at all management levels with the application and enforcement of a rigorous system of implementation.

Non-compliance

Customer requests that would result in a fit-up of either higher or lower quality will be considered non-compliant. Similarly, substitutions that create non-standard office accommodations and do not facilitate relocations will not be approved. There will, however, be exemptions to allow for specific requirements related to heritage buildings.

Non-standard fit-up components that are required to facilitate program delivery, as in the case of secure administrative or quasi-judicial offices, are not considered general-purpose office requirements and, therefore, not considered in this section of the manual. Refer to Section C.

Common Sense and Best Value for Canadians

The Fit-up Standards are the baseline for the identification of non-compliance; however, there can never be a substitute for sound judgment and common sense. The project team must use the standards wisely and question the validity of each of its components against the problem at hand.

An overall advantage to the taxpayer and the Crown takes precedence over benefits to a particular customer and over these standards. If minor adjustments to the approach or to the typical provisions included in the Fit-up Standards can benefit the customer without having adverse impact on the planning principles, project quality or cost, the project team should document these decisions (with justification for audit purposes) and proceed with implementation.

For example, in certain situations, coat storage may be more appropriate and useful to the customer than cabinet storage in a meeting room, and an exchange of these fit-up components would be deemed acceptable. (See Chapter A3.3 and Sample Plan PL1 in Chapter A5.2, for additional examples.) Also, if a space is leased "as is", but the hard walled spaces are not sized according to the standard (larger or smaller), it would NOT demonstrate sound judgment or sustainability (economic or environmental) to "right size" the spaces.

A2. Approvals and Governance

Compliance with the Fit-up Standards

Approval Authorities for Non-compliance with the Fit-up Standards

The Accommodation Standards Committee (ASC) has been established in PWGSC to help ensure a disciplined, objective, and consistent approach to decision-making, monitoring and reporting on the implementation of the Fit-up Standards. The ASC evaluates all requests from departments and agencies for exemptions from the space allocation limits and the Fit-up Standards, and prepares a recommendation to the ADM, Real Property Branch (RPB). The ADM, RPB, has the authority for approval of requests for non-compliance with the Fit-up Standards.

In customer departments and agencies, it is recommended that a comparable level of authority be identified to approve the department's or agency's justified requests for non-compliance, to approve the funding, and to accept accountability for the decisions and any project delays, if applicable.

A2. Approvals and Governance

Compliance with the Fit-up Standards

A2.2 Compliance Monitoring

The delivery of fit-up projects generally follows the PWGSC project delivery system. Each phase of the process and each deliverable represents an opportunity to validate compliance or non-compliance with the Fit-up Standards.

At the planning stage of the project, the Investment Analysis Report (IAR) is the vehicle to put to the forefront any potential non-compliance with the standards. The IAR provides an overview of the department/agency's requirements. The Fit-up Compliance Monitoring Form is attached to the project file at this point, to identify whether the project is compliant or non-compliant with the Fit-up Standards. Where non-compliance requests occur, the form serves to identify the nature of the request, and the status of receiving justification, approval and funding from the proponent department/agency, and finally, the decision from the ADM, RPB.

Upon completion of the functional program and at each subsequent phase of the project, the Fit-up Compliance Monitoring Form is updated by the Project Leader or Project Manager, who is responsible for documenting and costing all non-compliant items requested. The customer department is responsible for providing the justification or business case for the request, providing the funding, and accepting accountability for any delays in the project incurred by the approval process. (Refer to Chapter A2.4 for details on the submission requirements for requests for non-compliance approval.)

Upon completion of fit-up projects, Project Leaders/Accommodation Managers are responsible to provide signed copies of Fit-up Compliance Monitoring Forms to their respective Regional Manager, Accommodation Management, for tracking purposes. It is critical for both the customer and PWGSC to demonstrate that they have exercised due diligence throughout the project, in protecting the interests of the Crown, and the taxpayer with regard to federal accommodation spending.

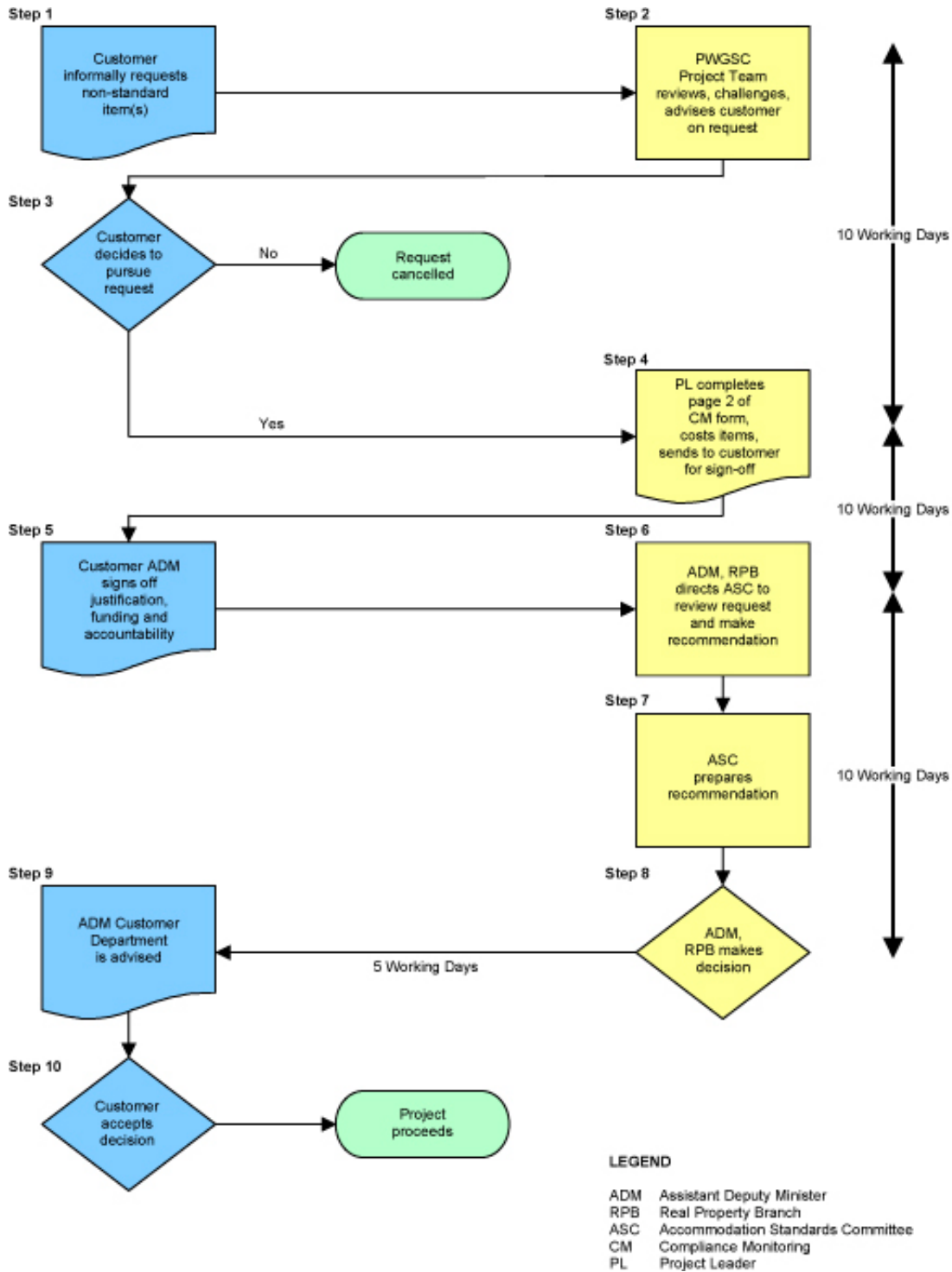
Reimbursing departments are subject to the same compliance monitoring process as non-reimbursing departments. As well, contracted services are monitored through performance-based contracts and their work is subject to audit to assure compliance with the Fit-up Standards.

A2. Approvals and Governance

Compliance Monitoring

A2.3 Process for Approval of Non-compliance

The following flowchart and table describe the national process for managing requests for exemptions to the Fit-up Standards and/or space allocation standards.



A2. Approvals and Governance

Process for Approval of Non-compliance

Step 1 Customer	.1 Customer makes informal request for non-standard item(s) to PWGSC, Project Leader (PL): <ul style="list-style-type: none"> • Accommodation Management, if a fit-up project; • Asset and Facilities Management, if tenant service work.
Steps 2 – 4 inclusive, to be completed within 10 working days	
Step 2 PWGSC	.1 PL reviews the request in consultation with project team. .2 Project team confirms that request exceeds Fit-up Standards and/or space allocation limits and is non-compliant on the basis that it is: <ul style="list-style-type: none"> • not a program requirement; • not in the best interest of the taxpayer or Crown; and/or • not demonstrating sound judgment/common sense. .3 PL advises customer: <ul style="list-style-type: none"> • whether or not the project team will support the request; and • the impact on project delivery of implementing the non-compliance approval process.
Step 3 Customer	.1 If customer decides not to pursue request, process is terminated. .2 If customer decides to pursue request, proceed to step 4.
Step 4 PWGSC	.1 PL completes page 2 of the compliance monitoring form in the project file, listing and costing each non-compliant item. .2 PL provides customer with a copy of the form and requests that the "justification" and "source/availability/commitment of funds" sections of the form be completed and signed off by the customer's senior departmental signing authority and chief financial officer.
Step 5, to be completed within 10 working days	
Step 5 Customer	.1 Customer completes sections of the compliance monitoring form providing the justification, source/availability/commitment of funds, and accepting accountability for project delays. This is signed off at a level of authority comparable to an ADM, and sent to the ADM Real Property Branch (RPB).
Steps 6 – 8 inclusive, to be completed within 10 working days	
Step 6 PWGSC	.1 ADM RPB directs the Accommodation Standards Committee (ASC) to review the completed compliance monitoring form and project information, and make a recommendation.
Step 7 PWGSC	.1 ASC reviews and makes recommendation on non-compliance requests directly to the ADM RPB.
Step 8 PWGSC	.1 ADM RPB reviews recommendation and makes decision. .2 ASC prepares letter to customer department ADM for ADM RPB signature, advising customer of criteria, PWGSC position on the issue, and decision.
Step 9, to be completed within 5 working days	
Step 9 PWGSC	.1 Customer department ADM is advised of decision through letter from ADM RPB.
Step 10	.1 Customer department accepts decision, and project proceeds.

Approvals and Governance

Process for Approval of Non-compliance

A2.4 Requirements for Submissions to the ADM RPB

Departments/agencies must submit their requests for exemptions from the Fit-up Standards to the ADM, RPB, who will direct the request to the Accommodation Standards Committee (ASC) for review and recommendation.

Requests for non-compliance must be accompanied by a justification, customer department senior management level approval, confirmation of funding, and acceptance of accountability for any project delays incurred in the approval process. The funding will cover all direct and indirect costs related to the implementation of the non-compliant item or service, including management and design services, project delays, and ongoing operational and maintenance costs.

Information to be prepared by the department/agency, in consultation with the Project Leader/Project Team:

1. Cover letter to ADM, Real Property Branch
2. Summary business case (2-3 pages) including:
 - (a) Issue
 - (b) Background to the project:
 - Mandate of the department/agency
 - Existing situation
 - Project schedule
 - Work completed to date
 - (c) Gap analysis:
 - Space allocation issues
 - Non-compliance with the Fit-up Standards
 - (d) Impact analysis for each non-compliance item:
 - Justification
 - Anticipated costs, direct and indirect, short and long term
 - Schedule implications and proposed solutions
 - (e) Position of the department/agency
3. Floor plans
4. Any other relevant documentation that would support the request such as the Summary Functional Program.

A2. Approvals and Governance

Requirements for
Submissions to the
ADM RPB

Information to be prepared by the PWGSC Project Leader to support the PWGSC position:

1. Summary note to the Director, Accommodation Management, chair of the ASC, including:
 - (a) Summary of relevant facts, issues, and discussion points
 - (b) Position of the team
2. Most relevant project plans
3. Other relevant project documentation

Approvals and Governance

Requirements for
Submissions to the ADM
RPB

A2.5 Criteria for Evaluating Requests for Non-compliance

The Accommodation Standards Committee uses the following criteria to evaluate requests for exemption to the Fit-up Standards.

Evaluation Criteria	If Yes	If No
1. Is the request a program requirement?	<ul style="list-style-type: none"> • Consider recommending approval of the request (funding responsibility rests with the department/agency) • Proceed to next evaluation criterion 	<ul style="list-style-type: none"> • Proceed to next evaluation criterion
2. Is the request due to a health and safety issue?	<ul style="list-style-type: none"> • Consider recommending approval of the request • Proceed to next evaluation criterion 	<ul style="list-style-type: none"> • Proceed to next evaluation criterion
3. Are there alternative solutions that would be more compliant?	<ul style="list-style-type: none"> • Request that the proponent look at the alternative solutions in order to comply with the Standards 	<ul style="list-style-type: none"> • Consider recommending approval of the request (if adequately demonstrated) • Proceed to next evaluation criterion
4. Is the request in the best economic interest of the Crown and taxpayer?	<ul style="list-style-type: none"> • Proceed to next evaluation criterion 	<ul style="list-style-type: none"> • Consider recommending rejection of the request • Proceed to next evaluation criterion
5. Does the request demonstrate sound judgment and common sense?	<ul style="list-style-type: none"> • Consider recommending approval of the request 	<ul style="list-style-type: none"> • Consider recommending rejection of the request

A2. Approvals and Governance

Criteria for Evaluating Requests for Non-Compliance

A2.6 Non-compliance Trends and Reporting

The ASC monitors the requests received for non-compliance and regularly reports to senior management on progress towards the broad objectives of the Fit-up Standards.

Non-compliance requests are reviewed periodically, and evident trends are assessed when updating the Fit-up Standards.

A2. Approvals and
Governance

Non-compliance
Trends and Reporting



TAB A3. Standards



A3.1 Overview

The following chapters, A3.2 to A3.4, describe in detail the standards for space allocation, construction components and finishes that form the basis of a fit-up project. More specifically:

- A3.2 identifies the funding accountabilities for each typical project component and underlines the importance of correctly identifying and recording project costs;
- A3.3 provides detailed information on office assignment criteria and support space and related millwork provisions for various population ranges;
- A3.4 identifies the attributes of workstation panels (screens) that are specific to the Fit-up Standards.

The standards respond to government programs and priorities, and are compliant with all relevant codes, life safety and accessibility standards.

The Fit-up Standards are derived from the *Framework for Office Accommodation and Accommodation Services* (1996). They have been updated to respond to our current operating environment, most notably, our collective commitment and responsibility to reduce costs associated with federal accommodation in order to redirect savings to higher government priorities. By emphasizing a consistent and sustainable approach to construction and finishing, and by limiting the number of closed offices and support spaces, the standards will help achieve space and related cost savings as well as facilitate relocations and the reuse of space by other departments/agencies.

Where there is conflicting information, the Fit-up Standards shall take precedence over the generic standards of the *Framework*.

Base Building Standards

The baseline or starting point for any fit-up project is determined by the base building conditions. Whether the facility is Crown-owned or leased, base building conditions will always vary depending on the location, age, size, classification and other characteristics of the site. In leased space, the extent of the landlord's responsibility with respect to those conditions is as outlined in the Leasing Standard and finalized through lease negotiations. No modifications may be made to the base building components other than those itemized in the lease agreements or otherwise taken into account in making the original investment decision.

A3. Standards

Overview

The base building standards, currently under development, will form the basis for new Crown-owned and leased facilities over 10 000 m² as well as major modernizations of same. They will be the primary reference for all technical and life safety standards related to plumbing, HVAC, fire protection, electrical and telecommunication systems.

A3. Standards

Overview

A3.2 Fit-up Components and Funding Accountabilities

The following chart identifies components that may be part of a fit-up project.

Funding accountabilities for the components are as follows:

- Base building components are funded by PWGSC;
- Fit-up Standard components for non-reimbursing customers are funded by PWGSC;
- Fit-up Standard components for reimbursing customers and Expansion Control Framework are funded by the customer department or agency;
- Other components are funded by the customer department or agency, including all related commissioning, testing and ongoing maintenance.

Components		Base Building	Fit-up Standard	Other
A	Substructure			
	1. Foundations and basements including slab on grade	Yes		
	Alteration to suit customer requirements (e.g. addition of window wells).			Yes ¹
B	Shell			
	1. Suspended floor slabs and roof structure	Yes		
	Alteration to suit customer requirements (e.g. to increase loading capacity, add stair).			Yes ¹
	2. Exterior closure, including walls, windows, doors and roofing	Yes		
	Alteration to suit customer requirements.			Yes ¹
C	Interior Construction			

A3. Standards

Fit-up Components and Funding Accountabilities

¹ Customer cost – subject to the non-compliance approval process (see chapter A2)

Components		Base Building	Fit-up Standard	Other
1. Walls				
	(a) <i>Building core, shear and shaft walls (stairwells, utility spaces).</i>	Yes		
	(b) <i>Demising walls</i> (i) Multiple-tenant floors and cross-over floors – constructed to meet current Building Code requirements.	Yes		
	Additional demising wall treatments to meet customer security requirements (e.g., wire mesh, security grills in ductwork) and related ongoing maintenance.			Yes ²
	(c) <i>Partition walls: (See part F for furniture screens/panels)</i> (i) Closed offices <ul style="list-style-type: none"> • Director, DG and ADM level – slab to underside of ceiling with insulation and plenum barriers (enhanced speech privacy). • All other closed offices, e.g. senior departmental representative in regional offices – slab to underside of ceiling with insulation (standard speech privacy). • ADM offices requiring secure speech privacy (as determined by a Threat and Risk Assessment (TRA)) – slab to slab construction. 		Yes	
	(ii) Support spaces <ul style="list-style-type: none"> • Storage rooms, shared equipment areas, kitchenettes and similar functions – slab to underside of ceiling with insulation (standard speech privacy). 		Yes	
	<ul style="list-style-type: none"> • Meeting, training, quiet rooms and similar functions – slab to underside of ceiling with insulation and plenum barriers (enhanced speech privacy). 		Yes	

A3. Standards

Fit-up Components and Funding Accountabilities

² Customer cost – NOT subject to the non-compliance approval process.

Components		Base Building	Fit-up Standard	Other
	<ul style="list-style-type: none"> Telecommunications rooms – slab to underside of ceiling with insulation and plenum barriers. See A4.1. 	Yes		
	<ul style="list-style-type: none"> Video conference rooms – slab to slab construction. 			Yes ¹
	<p>(iii) Glazing treatments</p> <ul style="list-style-type: none"> Treated sidelights and clerestory glazing as illustrated in A6.3. <p>Note: glazing treatments may be appropriate for increased light transfer or visual access but are not recommended when speech privacy is a priority.</p>		Yes	
	Additional partition walls or partition wall treatments to meet customer security requirements (e.g. wire mesh, security grills in ductwork) and related ongoing maintenance.			Yes ²
	Additional partition walls or other special construction and related maintenance.			Yes ¹
	2. Doors and frames			
	(a) <i>Flush solid core wood doors – standard height and width (6'-8" or 7'0" x 3'-0") wood veneer or paint finish. (Transfer grills are provided on telecommunication room doors if required.)</i>		Yes	
	(b) <i>Wood or steel frames – natural (stain) or paint finish.</i>		Yes	
	(c) <i>"Vision ports" or glazing treatments in doors.</i>		Yes	
	(d) <i>Fire-rated doors and frames as required by code.</i>		Yes	
	Other door and frame sizes or types or additional treatments to suit customer requirements.			Yes ¹
	3. Door hardware			
	(a) <i>Mortise (keyed) lock set (with two sets of reproducible keys) and lever trim (handle) on suite entry doors.</i>		Yes	

A3. Standards

Fit-up Components
and Funding
Accountabilities

Components		Base Building	Fit-up Standard	Other
	(b) <i>Cylinder latch or keyed lock set (with two sets of reproducible keys) and lever trim (handle) on all other room doors.</i>		Yes	
	(c) <i>Dummy levers on closet doors.</i>		Yes	
	(d) <i>Door closers as required by building code.</i>		Yes	
	(e) <i>Acoustical seals as required by level of speech privacy.</i>		Yes	
	(f) <i>Accessibility hardware on main doors into building to meet building code.</i>	Yes		
	Additional accessibility (Duty to Accommodate) or security hardware and related ongoing maintenance.			Yes ²
	Additional door hardware and related ongoing maintenance.			Yes ¹
4. Interior specialties				
	(a) <i>Washrooms</i> (i) <i>Core washroom fixtures, compartments, counters and dispensing accessories to meet base building standards.</i>	Yes		
	(b) <i>Cabinetry and millwork</i> (i) <i>Counters and/or storage cabinets in meeting rooms, quiet rooms, kitchenettes and shared equipment areas as allocated in A3.3 and illustrated in A6.2 – custom grade construction. Horizontal surfaces – laminate finish, vertical surfaces – paint or laminate finish or unfinished to suit substrate (MDF).</i>		Yes	
	(ii) <i>Service counters and carrels in public contact spaces only (construction and finishing as above).</i>		Yes	
	(iii) <i>Kiosks for public contact spaces.</i>			Yes ²
	(iv) <i>Reception desks.</i>			Yes ²

A3. Standards

Fit-up Components and Funding Accountabilities

Components		Base Building	Fit-up Standard	Other
	(v) Coat closet – rods and shelves as allocated in A3.3.		Yes	
	(vi) Storage shelving, etc., (including high density mobile systems).			Yes ²
	Additional interior specialties and related ongoing maintenance (e.g. additional millwork, modifications to base building washrooms).			Yes ¹
D	Interior finishes (see A7)			
	(a) <i>Building core areas</i>			
	(i) Wall, floor, ceiling and base treatments to core areas, main entrance, lobbies and other base building support areas.	Yes		
	(b) <i>Office and support areas</i>			
	(i) Ceiling finishes			
	<ul style="list-style-type: none"> • Base building standard (typically acoustic tile). 	Yes		
	<ul style="list-style-type: none"> • Bulkheads as required to suit mechanical design or other site constraints. 	Yes	Yes	
	(ii) Floor finishes			
	<ul style="list-style-type: none"> • Typically carpet, resilient sheet or tile, ceramic tile or “unfinished” (sealed concrete) to suit function of space. 	Yes		
	<ul style="list-style-type: none"> • Modifications to base building floor finishes to enhance way finding and durability in major circulation paths (carpet inserts) maximum 10% of floor area. 		Yes	
	<ul style="list-style-type: none"> • Raised floor systems, anti-static, epoxy or other special treatments to suit customer requirements. 			Yes ¹
	(iii) Wall/base finishes			
	<ul style="list-style-type: none"> • Exterior perimeter walls and columns (to meet base building standard). 	Yes		

A3. Standards

Fit-up Components
and Funding
Accountabilities

Components		Base Building	Fit-up Standard	Other
	<ul style="list-style-type: none"> Partitions (paint or unfinished to suit performance requirements and substrate, limited use of wall coverings as required in high traffic areas only). 		Yes	
	<ul style="list-style-type: none"> Carpet, rubber or ceramic base treatment to suit flooring. 		Yes	
	<ul style="list-style-type: none"> Tackable/acoustical wall treatment on interior of meeting rooms as illustrated in A5. 		Yes	
	Additional finishes and related ongoing maintenance.			Yes ¹
E	Services			
	1. Conveying systems			
	(a) <i>Vertical transportation, finished elevators and escalators (if existing in building).</i>	Yes		
	(b) <i>Keyed access, additional doors, private elevators.</i>			Yes ¹
	Additional systems or modifications and related ongoing maintenance.			Yes ¹
	2. Plumbing systems			
	(a) <i>Basic building and core area services, including regular and accessible plumbing fixtures, drinking fountains, domestic water, sanitary waste and rainwater systems.</i>	Yes		
	(b) <i>Stainless steel sink(s) in kitchenettes c/w CW, HW, insulation, drain and vent piping.</i>		Yes	
	(c) <i>Washrooms (in addition to base building washrooms) for the exclusive use of the customer, including all related fixtures and services.</i>			Yes ¹
	(d) <i>Washrooms/showers required as part of TBS approved departmental program requirement only – fixtures to match base building quality.</i>			Yes ²

A3. Standards

Fit-up Components and Funding Accountabilities

Components		Base Building	Fit-up Standard	Other
	(e) <i>Common shower facilities (Workplace Fitness Policy).</i>			Yes ²
	(f) <i>Relocate/add drinking fountains to suit planning requirements.</i>		Yes	
	Additional systems and related ongoing maintenance.			Yes ¹
3. Heating, ventilation and air-conditioning systems				
	(a) <i>Basic building and core area systems, including fuel supply, heat generation, rejection, distribution and transfer systems, controls, testing and balancing.</i>	Yes		
	(b) <i>Main trunk ductwork, branch ductwork, base building terminal units, controls and base building distribution.</i>	Yes		
	(c) <i>Relocate and/or add, ductwork, terminal units (VAV boxes, fan coil units, etc.), diffusers, controls, including systems testing and balancing (to meet latest ASHRAE standards 55 and 62). See A.6 for thermostat control.</i>		Yes	
	(d) <i>Meeting/training rooms, public service area, kitchenette and shared equipment area ventilation – add/relocate terminal units (VAV boxes, fan coil units) recirculating fans or A/C units including associated controls. See A.6.</i>		Yes	
	(e) <i>Separate continuous 24/7 cooling in telecommunications rooms to meet environmental conditions specified in ANSI/TIA/EIA-569-B (for new major retrofit or new construction or new major lease buildings).</i>	Yes		
	(f) <i>Controls and monitoring – relocate and/or add thermostats, valves, sensors, terminal unit controller (VAV boxes, fan coil units control) control points, etc.</i>		Yes	
	Additional systems and related ongoing maintenance (e.g. additional or separate air conditioning for server or UPS rooms).			Yes ¹

A3. Standards

Fit-up Components
and Funding
Accountabilities

Components		Base Building	Fit-up Standard	Other
4. Fire protection systems				
	(a) <i>Sprinkler, standpipe and hose systems (all areas), fire extinguishers.</i>	Yes		
	(b) <i>Relocate/add sprinkler heads and hose systems to suit layout.</i>		Yes	
	(c) <i>Heat detectors, smoke detectors as required by code.</i>		Yes	
	(d) <i>Additional fire extinguishers as required by code.</i>		Yes	
	Additional fire protection systems and related ongoing maintenance.			Yes ¹
5. Electrical systems				
	(a) <i>Power</i>			
	(i) <i>Service, distribution and emergency (life safety) building power (including main and floor level electrical rooms).</i>	Yes		
	(ii) <i>Relocate/add power circuits (typically one circuit/two workstations) receptacles, conduits and raceways to suit function and layout (to meet the standards outlined in the "Design Guideline – Powering General Office Spaces").</i>		Yes	
	(iii) <i>Dedicated circuits and 220V outlets in support spaces as illustrated.</i>		Yes	
	(iv) <i>UPS, "clean" power and other dedicated circuits for customer operational requirements.</i>			Yes ²
	(v) <i>Generator for customer's operational requirements.</i>			Yes ²
	(vi) <i>Enhanced accessibility measures (e.g. visual alarm systems, etc.) – Duty to Accommodate.</i>			Yes ²

A3. Standards

Fit-up Components and Funding Accountabilities

Components		Base Building	Fit-up Standard	Other
	<i>(b) Lighting</i>			
	(i) Lighting and power distribution to core and open office areas.	Yes		
	(ii) Modifications to base building fixtures (including the addition of parabolic louvers). Refer to Base Building Standards.			Yes ¹
	(iii) Relocate/add base building lighting to suit function and layout.		Yes	
	(iv) Lighting modifications to suit meeting room functions as illustrated in A6.3.		Yes	
	(v) Task lighting.			Yes ²
	(vi) Additional lighting and power for special customer needs including video conference services, etc.			Yes ¹
	<i>(c) Controls and monitoring</i>			
	(i) Controls and instrumentation (e.g. computerized switching, energy monitoring and control systems).	Yes		
	(ii) Modify controls and/or instrumentation to suit layout or monitoring requirements (e.g. separate switching of closed offices, meeting rooms etc. or monitoring the energy consumption of a particular function or group). The use of motion sensor lighting controls is encouraged.		Yes	
	(iii) Critical level and advanced controls for special customer requirements (e.g. specialized control systems for computer room).			Yes ²
	<i>(d) Fire alarm systems</i>			
	(i) Fire alarm with detectors, bells, pull stations, voice communication and annunciators.	Yes		
	(ii) Relocate/add fire alarm points to suit office layout.		Yes	

A3. Standards

Fit-up Components
and Funding
Accountabilities

Components		Base Building	Fit-up Standard	Other
	Additional electrical systems, infrastructures and related ongoing maintenance			Yes ¹
	6. Telecommunications Systems (see A4.1)			
	(a) <i>Spaces and pathways</i>	Yes		
	(i) Main service entrance room.			
	(ii) Generic backbone (also called “vertical” or “riser”), pathways (such as conduit, cable tray and sleeves) connecting telecom distribution room(s) on each floor to the main telecom room and connecting main telecom room to telecom entrance room.	Yes		
	(iii) Dedicated backbone pathways requested by the customer (core or between floors).			Yes ¹
	(iv) Generic horizontal raceways (such as cable tray or conduit) from telecom distribution room(s) on each floor-to-floor zone to manage horizontal cabling. “J-hooks” may be used when the Crown has only a short-term interest in the space.	Yes		
	(v) Service poles for image, voice and data outlets (workstations).		Yes	
	(b) <i>Cabling</i>			
	(i) Generic backbone cabling (vertical and to connect multiple telecommunications rooms where required).	Yes		
	(ii) Horizontal distribution cabling and receptacles for voice, data, image and security.			Yes ²
	Additional telecommunications systems and infrastructures.			Yes ¹
	7. Security systems			
	(a) <i>Basic-building security (lockable exterior entrances, perimeter and vehicle controls if applicable, main level entry control).</i>	Yes		

A3. Standards

Fit-up Components and Funding Accountabilities

Components		Base Building	Fit-up Standard	Other
	(b) <i>Enhanced building and interior premises security.</i>			Yes ²
	Additional security systems and related ongoing maintenance.			Yes ²
F	Furnishings and Equipment			
	(a) <i>Window coverings</i>			
	(i) Exterior window coverings (to base building specification).	Yes		
	(ii) Additional treatments to exterior windows.			Yes ¹
	(iii) Treatments to interior glazing other than as illustrated in drawing examples (film) and noted in part C 1 (iii).			Yes ¹
	(b) <i>Furniture and equipment</i>			
	(i) Panels/screens c/w service poles (midrange quality component system with acoustical properties and power/data capability). See A3.4.		Yes	
	(ii) Integrated and movable furnishings including horizontal components (work surfaces, tables, cabinets, storage pedestals, overhead shelving), chairs, task lights, etc.			Yes ²
	(iii) Telephone equipment, computers, photocopiers, fax machines, etc.			Yes ²
	(iv) Visual aid boards including white boards, bulletin boards etc. (including installation).			Yes ²
	(c) <i>Signage and accessories</i>			
	(i) Common use signs including the main (lobby area) directory, fire exiting routes, etc.	Yes		
	(ii) Operational signage: based on the operational requirements of the customer including directional and location signs, name plates, informational signs, etc.			Yes ²

A3. Standards

Fit-up Components
and Funding
Accountabilities

Components		Base Building	Fit-up Standard	Other
	(iii) Plants, planters and related ongoing maintenance are only provided as deemed appropriate by PWGSC for specific site and planning conditions, and as per approved horticultural plans and specifications.		Yes	
	(iv) Artwork.			Yes ²
G	Building Site Work			
	(a) <i>Site preparation, site improvements, utility tunnels, site utilities (including communication media access).</i>	Yes		
	(b) <i>Primary identification signage (building), flagpole and base.</i>	Yes		
	Additional site work and site improvements, increased utility requirements, etc.			Yes ¹

A3. Standards

Fit-up Components
and Funding
Accountabilities

A3.3 Office and Support Space Allocations

The following notes and tables summarize provisions for various types of office and support spaces.

Office Space

Workstations

See A6.1 for drawings that illustrate typical sizes and configurations of workstations including standard mechanical and electrical provisions. A universal workstation module, adaptable to team or individual configuration, is assigned to all personnel in an open systems furniture environment. The workstation area may vary between 5.9 m² and 7.4 m². The actual dimensions and configuration will depend upon specific site conditions and program requirements. Workstations in this size range can easily be reconfigured to accommodate two people, suitable for part-time, temporary, student or similar personnel.

The size and number of panels/screens used to define a workstation will vary. See A3.4 for information on panel/screen standards, and A5.1 for planning applications.

Floor finish: base building standard carpet

Lighting: base building lighting

Closed Offices

See A6.1 for drawings that illustrate typical sizes and configurations of closed offices including standard mechanical and electrical provisions. The following table summarizes provisions for closed offices for various functions.

Function	Maximum Area (m ² u)
EX-5 and EX-4 positions and equivalents (e.g. ADMs, members of boards, commissions and councils)	28
EX-3 positions and equivalents (e.g. directors general)	23
EX-2 and EX-1 positions and equivalents ¹ no more than 3 levels below the DM (e.g. directors)	18.5
Other EX-1 positions and equivalents with 10 or more funded reports (where space allows)	13.9
Senior departmental representatives (the most senior position at small regional offices or remote locations)	13.9

The minimum closed office size is 13.9 m² or as dictated by the building module (nominal 10 x 15 office).

See R2 for examples of possible office assignments.

Offices are to be located on the interior where building conditions allow. Requests to locate offices for EX-3 positions and below along the perimeter would generally be considered non-compliant. Locating offices for ADMs on the interior is also strongly encouraged, however, placing them along a window would not be considered non-compliant.

Floor finish: base building standard

Wall finish: paint or unfinished to suit substrate

Lighting: base building (may be relocated to suit) with separate switching

Note: The project team must always consider the impact of discretionary assignment of closed offices within the context of the total project requirements and the space limitations of a 16 m²u/person ratio.

A3. Standards

Office and Support Space Allocations

¹ EX equivalents are as defined in the Public Service Human Resources Management Agency of Canada listing (2003-11-18)

Support Spaces

Keeping in mind the general principles of consistency (common look and feel) and flexibility, the allocation of all support space functions should relate to the population of each floor (i.e. making each floor as "generic" as possible so the spaces can endure multiple tenants with minimum modifications). It is expected the size of spaces and the quantity of millwork identified for support spaces could vary by up to 15% (larger or smaller than the sizes shown) to suit the specific site conditions and program requirements.

Meeting Rooms

See A6.2 for drawings that illustrate typical sizes and configurations of meeting rooms, including counter/storage provisions, lighting modifications, and mechanical and electrical provisions. Counter/storage configurations may vary as long as the total allowances indicated are respected (e.g. extend counter surface while reducing the amount of storage below or decrease counter surface and increase height of storage). A larger meeting room may be "substituted" in place of multiple smaller meeting spaces (e.g. 1 medium in place of 2 small or 1 large in place of 1 medium and 2 small). However, if required, the larger area must be easily convertible back to the smaller rooms at minimal cost and with no additional impact on the space. Decisions of this kind should be considered as part of the initial project identification phases and documented accordingly in the project files. The following tables summarize provisions for meeting rooms for various population ranges on a floor.

# of FTEs per floor	Size of Meeting Room			Total
	Small 14m ² seats 6	Medium 30m ² seats 12	Large 68.8m ² seats 20+	
5 - 9	1	–	–	1
10 - 25	–	1	–	1
26 - 50	1	1	–	2
51 - 100	2	1	–	3
101 - 137	1	2	1	4
138 - 175	2	2	1	5

A3. Standards

Office and Support Space Allocations

Linear mm of counter and lower storage (at approximately 750 high) in each size of meeting room		
Small	Medium	Large
900 (3')	2400 (8')	4500 (15')

Floor finish: base building standard carpet

Wall finish: paint or unfinished to suit substrate with tackable acoustical wall treatment as shown on plan examples

Lighting: direct/indirect suspended luminaire(s) to suit meeting (table) function with perimeter/accent lighting to support presentation function with separate switching

Quiet/Touchdown Rooms

See A6.2 for a drawing that illustrates the typical provisions for quiet rooms. These are spaces intended for the shared use of personnel who normally occupy workstations. They provide an enhanced acoustical environment for a private telephone call, to support work requiring a high level of concentration, or similar functions.

Planning ratio: one 5m² (54 ft²) quiet room for every 45 FTEs for populations greater than 10

Floor finish: base building standard carpet

Wall finish: paint or unfinished to suit substrate

Lighting: base building with separate switching (task lighting recommended)

A3. Standards

Office and Support
Space Allocations

Kitchenettes

See A6.2 for a drawing that illustrates the typical provisions for a kitchenette. The sample plans in A5 illustrate some typical configurations of these spaces sized, in each case, to suit the population they serve. Larger kitchenette areas shall be designed to accommodate multiple functions and shall be usable as informal meeting, work or resource areas as well as coffee/lunch facilities and recycling centres. Similarly, where populations warrant multiple provisions, it may be appropriate to have one main and one secondary facility (e.g. one 50 m² kitchenette/multiple function area and one 10 m² "coffee station").

Kitchenette areas may be open or semi-enclosed but entrance doors are not provided.

The following summarizes provisions for kitchenettes for various population ranges:

# of FTEs per floor	# and size of areas	lin. mm of counter and upper/lower storage in each area
2-4	one 3 m ²	1500 (5')
5 - 25	one 10 - 20 m ²	2400 (8')
26 - 50	one 20 - 30 m ²	3000 (10')
51 - 100	one 30 - 40 m ²	3600 (12')
101 - 137	two 20 - 30 m ²	3000 (10')
138 - 175	two 30 - 40 m ²	3600 (12')

Floor finish: resilient sheet or tile

Wall finish: paint or unfinished to suit substrate

Lighting: base building with separate switching if area is semi-enclosed

A3. Standards

Office and Support
Space Allocations

Shared Equipment Areas

See A6.2 for a drawing that illustrates the typical provisions for a shared equipment area. Shared equipment areas may be open or semi-enclosed but entrance doors are not provided. Overhead storage is not provided, however, kitchenette overheads may be substituted here and modified to suit. The following summarizes provisions for shared equipment areas for various population ranges:

# of FTEs per floor	# and size of areas	lin. mm of counter and lower storage in each area
1 – 4	one 5 m ²	1800 (6')
5 - 25	one 5 - 10 m ²	1800 (6')
26 - 50	one 10 - 14 m ²	2400 (8')
51 - 75	one 14 - 20 m ²	3000 (10')
76 - 100	two 10 - 14 m ²	2400 (8')
101 - 150	two 14 - 20 m ²	3000 (10')
151 - 175	three 10 – 14 m ²	2400 (8')

Floor finish: resilient sheet, tile or base building standard carpet

Wall finish: paint or unfinished to suit substrate

Lighting: base building with separate switching if area is semi-enclosed

Printer Stations

In addition to the centrally located, shared equipment areas, stations should be provided throughout the office for convenient access to network printers (see A5.2, Plan PL4 for typical distribution of printer stations).

Power and data services are provided to each location. There is no millwork allowance for these spaces and the customer is responsible for the provision of furniture and equipment.

Planning ratio: one printer station for every 10 – 15 FTEs

A3. Standards

Office and Support
Space Allocations

Reception Waiting Areas

Formal (primary), hard walled reception areas are only provided on one floor of a large multiple floor occupancy. Informal (secondary) reception areas typically take the form of a workstation on each floor equipped with a surface to receive and distribute mail and a small waiting area to accommodate some seating. This area may also accommodate coat storage and some display related to the business of the particular group(s) at that location. All reception area furniture is a customer cost. Planning example PL3 in A5 illustrates a typical primary reception area, and planning examples PL1 and PL4 illustrate typical secondary reception areas.

Coat Storage

Coat closets are provided in place of or to supplement workstation provisions for this purpose. Approximately 100 mm of hanging space is required for each coat/person or one 1.5 m (5'-0") closet for every 15 users.

Other Undesignated (Hard Walled) Support Space

All other support functions requiring enclosed spaces must be accommodated within 14 m² areas; sized, built and serviced (power and telecommunications) to accommodate office, meeting or other functions either initially or in the future. For higher populations, the 14 m² space allowances may be combined to create larger spaces as required (28 m², 42 m², etc.) as long as the larger room could be easily converted back to the smaller rooms at minimal cost and no additional impact on the space if required in the future.

The allowances for other hard walled support spaces are as follows:

# of FTEs per floor	# of 14 m ² spaces
3 - 20	1
21 - 50	2
51 - 80	3
81 - 110	4
111 - 140	5
141 - 175	6

A3. StandardsOffice and Support
Space Allocations

Other support functions include but are not limited to:

- storage and file rooms;
- resource rooms and libraries;
- server rooms (special mechanical provisions, if required, are customer responsibility);
- breakout rooms; and
- interview rooms.

Open Area Support Spaces

In addition to the hard walled support spaces, customers may choose to incorporate shared support spaces into open areas as long as the overall space utilization factor of 16 m²/person is not exceeded. Open area support spaces could include supplementary equipment areas, file areas, layout spaces, resource areas, etc. The regular workstation configurations are substituted by the appropriate furnishings to support the desired function. (See A5, Sample Plan PL 4, for examples).

First Aid Room/Station

A first-aid room is not required where a health unit or a similar emergency treatment facility is conveniently available to provide first-aid services (refer to Treasury Board Policy Chapter 2-5 First Aid Safety and Health Directive for additional details). As a result, first aid rooms are seldom justifiable and have been removed from many locations. If required, the planning ratio is as follows:

Planning ratio: 1 per 200 or more people

A3. Standards

Office and Support
Space Allocations

A3.4 Standards for Furniture Panels/Screens

Panels shall meet the requirements of CAN/CGSB-44.229 and the *Purchase Description for Interconnecting Panels and Supported Components* published by the Acquisitions Branch. The following additional restrictions apply to panel height, classification and finish options as well as power/voice/data receptacles.

Height

An average panel height of 1.37 m (54") offers the optimum balance between visual privacy for the occupant and lighting efficiency (transfer of daylight and uniform illumination from electric lights).

A combination of higher panels that accommodate seated/standing privacy and the capability to hang and access overhead storage (1675 mm / 66"), and lower panels to allow for increased light distribution and to accommodate wheelchair access (915 mm / 36"), work surface privacy (1065 mm / 42") and seated privacy (1320 mm / 52"), is typical in most office environments. Full standing privacy height panels do NOT meet the standard and are non-compliant. The dimensions listed may vary and are for information purposes only.

Classification

Panels that accommodate seated/standing privacy shall be standard acoustic class and panels that accommodate wheelchair access, work surface privacy or seated privacy shall be non-acoustic class. High performance acoustical panels do NOT comply with the standards.

Finish

Panel finish shall be fabric upholstered. Fabric shall be manufactured from recycled or other environmentally appropriate materials that respect the selection criteria identified in A7. Glass panels and sliding panels do NOT comply with the standards.

Power/Voice/Data Receptacles

Each workstation is provided with two duplex power outlets (4 receptacles) and one voice/data outlet. Refer to typical workstation layouts in A6 for additional information.

Note: The *Purchase Description for Interconnecting Panels and Supported Components* specifies the minimum components and capabilities of the electrical system. Federal employees occupy many buildings where these standard

A3. Standards

Standards for Furniture Panels/ Screens

electrical system capabilities (power/voice/data) cannot be fully realized due to the limitations of the base building systems. This does NOT imply that the base building infrastructure should be renovated to accommodate the furniture system capabilities. Therefore, the final electrical design shall not exceed the capacity of the base building infrastructure.

Special Technical Standards

Standards for Furniture
Panels/Screens



TAB A4. Special Technical Standards



A4.1 Telecommunications

Telecommunications Infrastructure

Although the base building standards (under development) will include telecommunications spaces and pathways, few buildings now contain a standards-compliant infrastructure of telecommunications rooms and pathways such as conduit or cable tray. In Crown-owned buildings, base-building deficiencies will usually not be corrected until half-life refit. In leased facilities, the "holistic" infrastructure described would typically only apply to buildings in which all office spaces are occupied by the Crown and where this infrastructure was required by the lease specification. In some cases it may be practical to provide this holistic infrastructure where the Crown has a long-term interest in a substantial portion of the building.

Accordingly, the approach to the telecommunications system will vary to suit the particular occupancy. Some examples of possible scenarios and solutions are provided below for clarification. Other solutions are possible.

Scenario 1 – Modernized Crown-owned building or new major lease, multi-department occupancy

Single shared telecommunications infrastructure (fully compliant with ANSI/TIA/EIA-569-A, including separate 24/7 air conditioning) that serves the building as a whole similar to other utilities. The infrastructure of telecommunications rooms and pathways accommodates fluctuations between single and multiple occupancies and endures changes in space allocations between occupants or the addition of new occupants. Generic holistic backbone cabling connects the telecommunications rooms vertically to the main terminal equipment room (MT/ER) and horizontally where required. Servers are centralized in the MT/ER which is sized for this purpose and located on one of the lower levels. Backbone pathways and cables also connect the MT/ER to the entrance room. Conduit or cable tray are used to support horizontal cable distribution.

Scenario 2 – Four floor occupancy, long term lease, “clean” space

No base building telecommunications infrastructure. A telecommunications infrastructure is provided as part of the fit-up standard and is similar to Scenario 1 in that the federal space is treated as a separate stand-alone building. One of the on-floor telecommunications rooms is enlarged so it also serves as the MT/ER for this occupancy and to accommodate servers. This additional space is provided from the

A4. Special
Technical
Standards

Telecommunications

"undesignated" support space allowance. Upgraded construction as well as mechanical/electrical services are funded by the customer.

Scenario 3 – Small (500 m² or less) long-term lease, previously occupied space

No base building telecommunications infrastructure. Backbone pathways and cabling as well as the on-floor telecommunications room are provided as part of the fit-up standard. An existing room is deemed appropriate for use as a telecommunications room and meets the intent of the TIA/EIA-569-A standard. J-hooks are used to support horizontal cable distribution. (Conduit or cable tray could also be used, if warranted by the characteristics of the space.) The telecommunications room also accommodates 3 servers (this number could vary). Separate 24/7 air conditioning is provided as part of the fit-up standard.

Scenario 4 – Short term lease (6 - 24 months), previously occupied space

No base building telecommunications infrastructure. Backbone pathways and cabling as well as the on-floor telecommunications room are provided as part of the fit-up standard. The telecommunications rooms are sized to meet the requirements of the occupant and make use of existing conditions wherever possible (i.e. common sense and best value for Canadians). No separate 24/7 air conditioning is provided in telecommunications rooms (exhaust fan and door vent only). J-hooks are used to support horizontal cable distribution. Customer requests a separate room for their servers which is provided from the "undesignated" support space allowance in place of another use. The customer funds any upgraded construction and electrical services required for this space as well as the separate 24/7 air conditioning required.

On-Floor Telecommunications Rooms

Ideally, on-floor telecommunications rooms form part of the base building infrastructure, but are often constructed as part of the fit-up process. Telecommunications rooms are typically sized, ventilated and air conditioned to accommodate racks, cabling, switches and other equipment specifically related to the connection of the backbone to the horizontal cabling and subsequent distribution of same. Each room is to be located as close as practicable to the centre of the area being served and preferably in the core area.

Telecommunications rooms complying with the requirements of ANSI/TIA/EIA-569 are sized as follows:

Area Served	Room Size
1000 m ²	3.3 m x 3 m (11' x 10')
800 m ²	2.8 m x 3 m (9' x 10')
500 m ²	2.2 m x 3 m (7' x 10')

On-floor telecommunications rooms are not normally server rooms but it may be possible to accommodate a few servers in this space without exceeding the air cooling capacity. The specific characteristics of the servers and their BTU output must be assessed to determine if co-locating the servers in the telecommunications room is the best option. In the case of short term leases, telecommunications rooms along with the other infrastructure spaces and pathways should be constructed to suit the particular parameters of the occupancy taking into account "common sense and best value for Canadians".

A4.2 Special Fire Protection Standards for Customer-funded Requirements/SPS

In addition to Provincial/Territorial code requirements, there are some standards and policies that must be followed when developing office space for Government of Canada occupants. The most common ones are listed below. You may find the specific requirements of each at the accompanying Web site locations.

1. **TBS Fire Protection Standard for Electronic Data Processing Equipment**
http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/tbm_119/3-3E1.asp
2. **Fire Commissioner of Canada – FC 311 (M) – Standard for Record Storage**
<http://www.hrsdc.gc.ca/en/lp/lo/fp/standards/311.shtml>
3. **Operations Program Directives No. 922-1-IPG-044 – Door Release Hardware – Electromagnetic Locks**
<http://www.hrsdc.gc.ca/en/lp/lo/opd-ipg/ipg/044.shtml>
4. **Mobile Shelving – Fire Protection Design Requirements**
<http://www.hrsdc.gc.ca/en/lp/lo/fp/design-requirements/mobile.shtml>

It is imperative that these standards and policies are considered early in the concept design stage, and as part of the review and approvals process throughout the development of the project.

A4. Special
Technical
Standards

Special Fire
Protection Standards
for Customer-funded
Requirements/SPS



TAB A5. Planning



A5.1 Planning and Design

An integrated design approach that allows for maximum flexibility is used in the planning of office spaces. The approach incorporates sustainable design principles, and meets or exceeds all code and life safety requirements, including accessible design.

Principles

The following planning and design principles are to be applied to the greatest extent possible:

- The number of screens used to define workstations and their orientation varies to suit proximity to major corridors or windows. For example, fewer screens are provided at window locations where traffic is minimal to allow increased transfer of natural light. Note also that workstations are removed slightly from the windows where possible for better air circulation and to further increase the transfer of daylight.
- Access to natural light is maximized by locating all hard walled offices and support spaces adjacent to the core. These are the “fixed” or permanent elements of the fit-up and are universally appropriate for the use of any occupant.
- Functions requiring enhanced or secure speech privacy are located near the core where acoustic control is not adversely affected by perimeter conditions. (Reference: *Speech Security: A Best Practice Guide*)
- Shared equipment and other support spaces are centrally located to concentrate noisier activities away from the workstation area.
- Locating meeting rooms in a central location also provides convenience for visitors and minimizes disruption for occupants.
- Kitchen areas accommodate recycling facilities and also serve as resource areas and informal meeting/work rooms.
- The amount of construction is minimized and implemented in a way that enables ease of disassembly and reuse to the greatest extent possible.

The exact size, configuration and placement of spaces will vary to suit each building's particular characteristics. The sample floor plans in Chapter A5.2 generally demonstrate the principles as outlined.

A5. Planning

Planning and Design

Impact of Usable Area on Space Utilization

As the total usable space and the total population decreases, the usable m² per person and the open/closed ratio increases. This is because all office locations, no matter how small the population, require a minimal number of support spaces to function effectively.

Circulation factors vary, generally increasing with the number of open area workstations.

The following sample plans illustrate these factors using standard office and support space allocations.

A5. Planning

Planning and Design

A5.2 Sample Plans

PL1 DIAGRAM

A5. Planning

Sample Plans

Planning Notes and Legend for PL1 Diagram

General Information

Total usable space: 324 m² (3,488 ft²) minus 71 m² (base building and SPS) = 253 m²

Total population: 12 (11 workstations, 1 closed office)

Population/space ratio: 21 m²/person

Open/closed ratio: 68:32

Total enclosed areas: 61 m² (656 ft²)

Total open areas: 192 m² (2,067 ft²)

Screen Configuration

The number of screens used to define each workstation will vary depending on proximity to major circulation paths vs. secondary circulation or windows areas. The illustrated configuration is considered adequate for a typical office environment.

List of Support Spaces

- 1 medium meeting room (10-12 people)
- 1 public waiting area
- 1 shared equipment area (copier/fax/printer)
- 1 kitchen/lunch area
- 1 interview room (1 other USS allowance)
- 1 reception area
- 1 closet
- 1 open soft seating area

List of Special Purpose Space

- 1 surveillance/storage room
- 1 special storage room
- 1 radio room
- 1 locker/shower room

List of Base Building Space

- 1 telecommunications room
- 2 washrooms

Legend



Solid lines indicate PWGSC fit-up limit



Dashed lines indicate tenant cost



Hatch patterns indicate carpet inserts and resilient sheet flooring



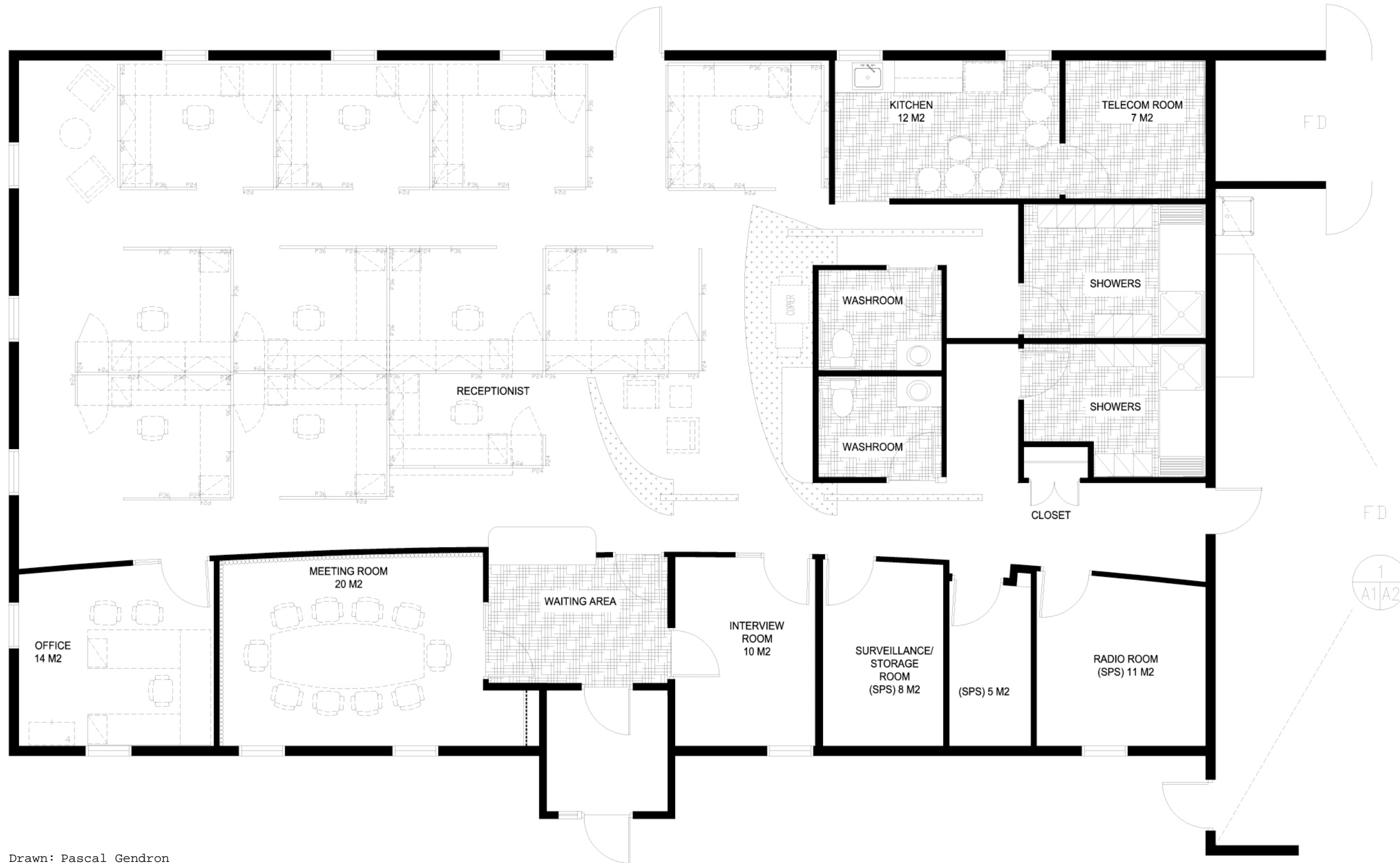
Curved lines indicate tackable/acoustical wall panels to meeting rooms (1 meter high panels mounted at approx. 1 meter AFF)

A5. Planning

Sample Plans

See chapter A3.3 for planning ratios and other requirements.

PL1 Diagram



Drawn: Pascal Gendron
April 20, 2005

A5. Planning

Sample Plans

PL2 DIAGRAM

A5. Planning

Sample Plans

Planning Notes and Legend for PL2 Diagram

General Information

Total usable space: 961 m² (10,344 ft²) minus 242.5 m² (telecom, BF washroom and SPS) = 718.5 m²

Total population: 43.5 (35 FTEs + 15 (½) FTEs, 1 closed office)

Population/space ratio: 16.5 m²/person

Open/closed ratio: 80:20

Total enclosed areas: 142 m² (1,528 ft²)

Total open areas: 576.5 m² (6,205 ft²)

Screen Configuration

The number of screens used to define each workstation will vary depending on proximity to major circulation paths vs. secondary circulation or windows areas. The illustrated configuration is considered adequate for a typical office environment.

List of Support Spaces

- 1 small meeting room (6 people)
- 1 medium meeting room (12 people)
- 1 shared equipment area (copier/fax)
- 1 kitchenette
- 1 office/storage room (1 other USS allowance)
- 1 breakout room (1 other USS allowance)
- 1 lunchroom/resource area
- 1 quiet room
- 1 closet

List of Special Purpose Space

- 1 training room
- 1 national training room for meteorologists
- 1 central registry
- 2 equipment/storage rooms

List of Base Building Space

- 1 telecommunications room
- 1 barrier-free washroom

Legend



Solid lines indicate PWGSC fit-up limit



Dashed lines indicate tenant cost



Hatch patterns indicate carpet inserts and resilient sheet flooring



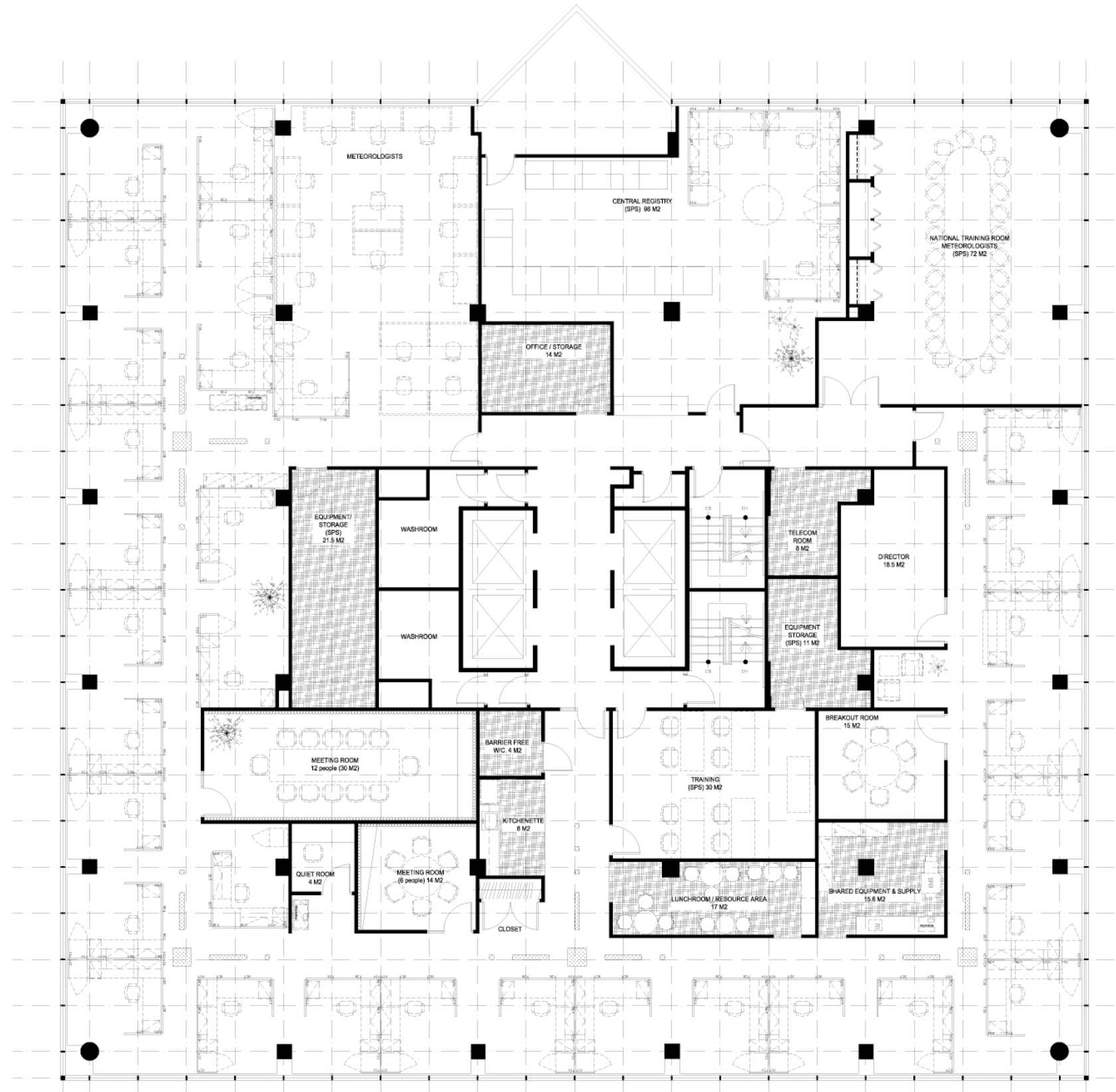
Curved lines indicate tackable/acoustical wall panels to meeting rooms (1 meter high panels mounted at approx. 1 meter AFF)

A5. Planning

Sample Plans

See chapter A3.3 for planning ratios and other requirements.

PL2 Diagram



Drawn: Pascal Gendron
April 20, 2005

A5. Planning

Sample Plans

PL3 DIAGRAM

Planning Notes and Legend for PL3 Diagram

General Information

Total usable space: 1336 m² (14,381 ft²) minus 536.5 m² (telecom, BF washroom and SPS) = 799.5 m²

Total population: 49 (48 workstations, 1 closed office)

Population/space ratio: 16.3 m²/person

Open/closed ratio: 73:27

Total enclosed areas: 211.8 m² (2,279.8 ft²)

Total open areas: 587.7 m² (6,326.9 ft²)

Screen Configuration

The number of screens used to define each workstation will vary depending on proximity to major circulation paths vs. secondary circulation or windows areas. The illustrated configuration is considered adequate for a typical office environment.

List of Support Spaces

- 2 small meeting rooms (6 people)
- 1 medium meeting room (10 people)
- 1 shared equipment area (copier/fax/printer)
- 1 kitchenette/lunchroom/resource area
- 2 quiet rooms
- 1 reception/waiting area
- 1 "other" support space (2 other USS allowance)

List of Special Purpose Space

- 1 mail room
- 1 cashier/safe/cheque printing
- 1 service copy/central records
- 1 conference/training centre

List of Base Building Space

- 1 telecommunications room
- 1 barrier-free washroom

Legend



Solid lines indicate PWGSC fit-up limit



Dashed lines indicate tenant cost



Hatch patterns indicate carpet inserts and resilient sheet flooring



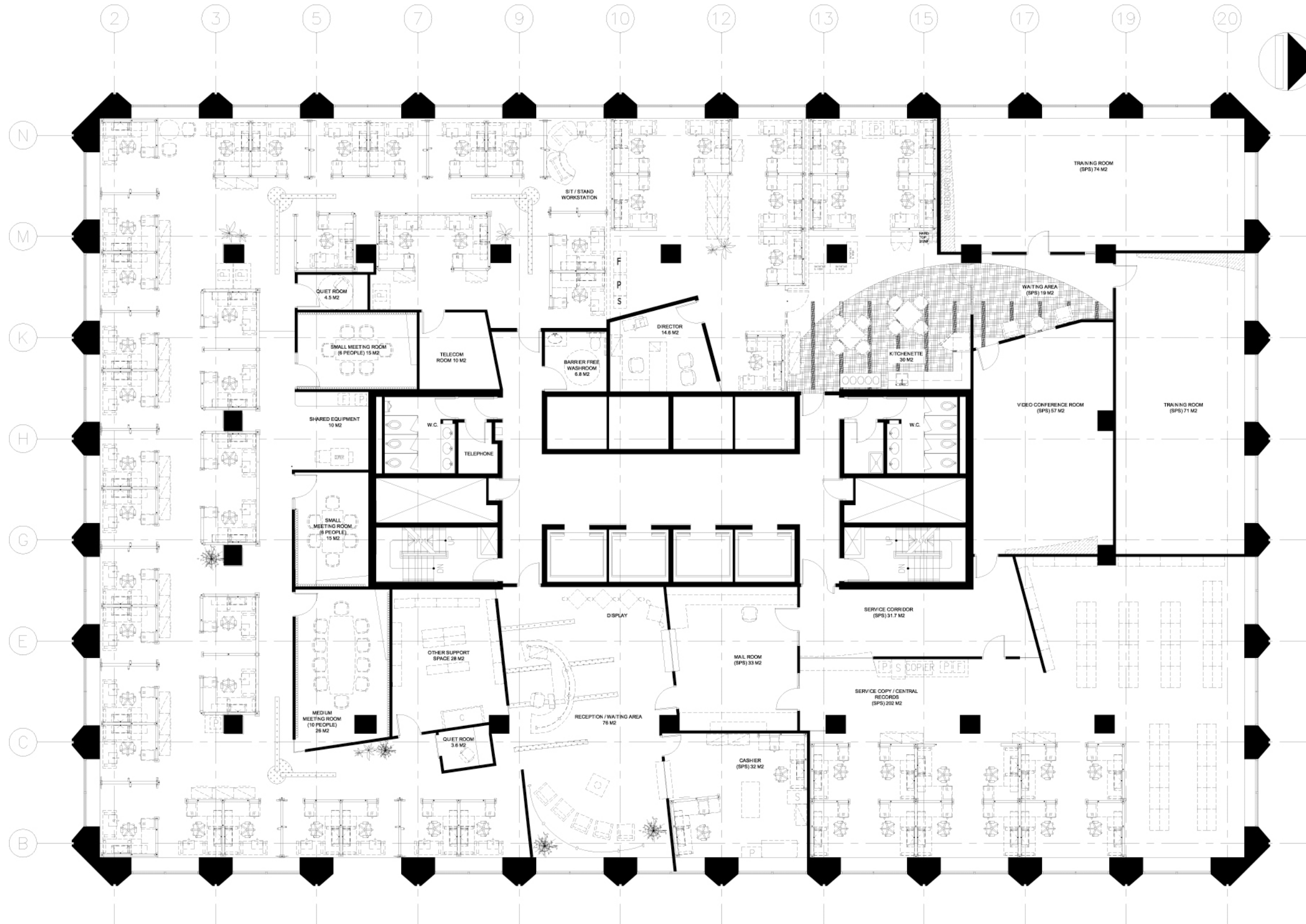
Curved lines indicate tackable/acoustical wall panels to meeting rooms (1 meter high panels mounted at approx. 1 meter AFF)

A5. Planning

Sample Plans

See chapter A3.3 for planning ratios and other requirements.

PL3 Diagram



A5. Planning

Sample Plans

PL4 DIAGRAM

Planning Notes and Legend for PL4 Diagram

General Information

Total usable space: 2878 m² (30,980 ft²)
 Total population: 178 (173 workstations, 5 closed office)
 Population/space ratio: 16 m²/person
 Open/closed ratio: 83:17
 Total enclosed areas: 477.4 m² (5,140 ft²)
 Total open areas: 2400.6 m² (25,840 ft²)

Screen Configuration

The number of screens used to define each workstation will vary depending on proximity to major circulation paths vs. secondary circulation or windows areas. The illustrated configuration is considered adequate for a typical office environment.






List of Support Spaces

1 large meeting room (20 people)
 2 medium meeting rooms (12 people)
 2 small meeting rooms (6 people)
 2 breakout rooms (4-6 people) (2 other USS allowance)
 4 quiet/touchdown rooms
 2 shared equipment areas (copier/fax/printer)
 2 kitchen/resource areas with recycling centres
 1 storage room (1 other USS allowance)
 1 reception/waiting area (seating for 4)
 4 closets
 1 open high density/storage area
 1 file/layout area
 14 printer stations

Telecommunications Rooms (Base Building)

Note: Based on the specific planning ratios, this example should illustrate 3 strategically located telecommunications rooms. While the designer must exercise great care when deviating from the planning ratio, the size and location of the 2 telecommunications rooms provided here are considered to be within “reasonable latitude” and meet the intent.

Legend

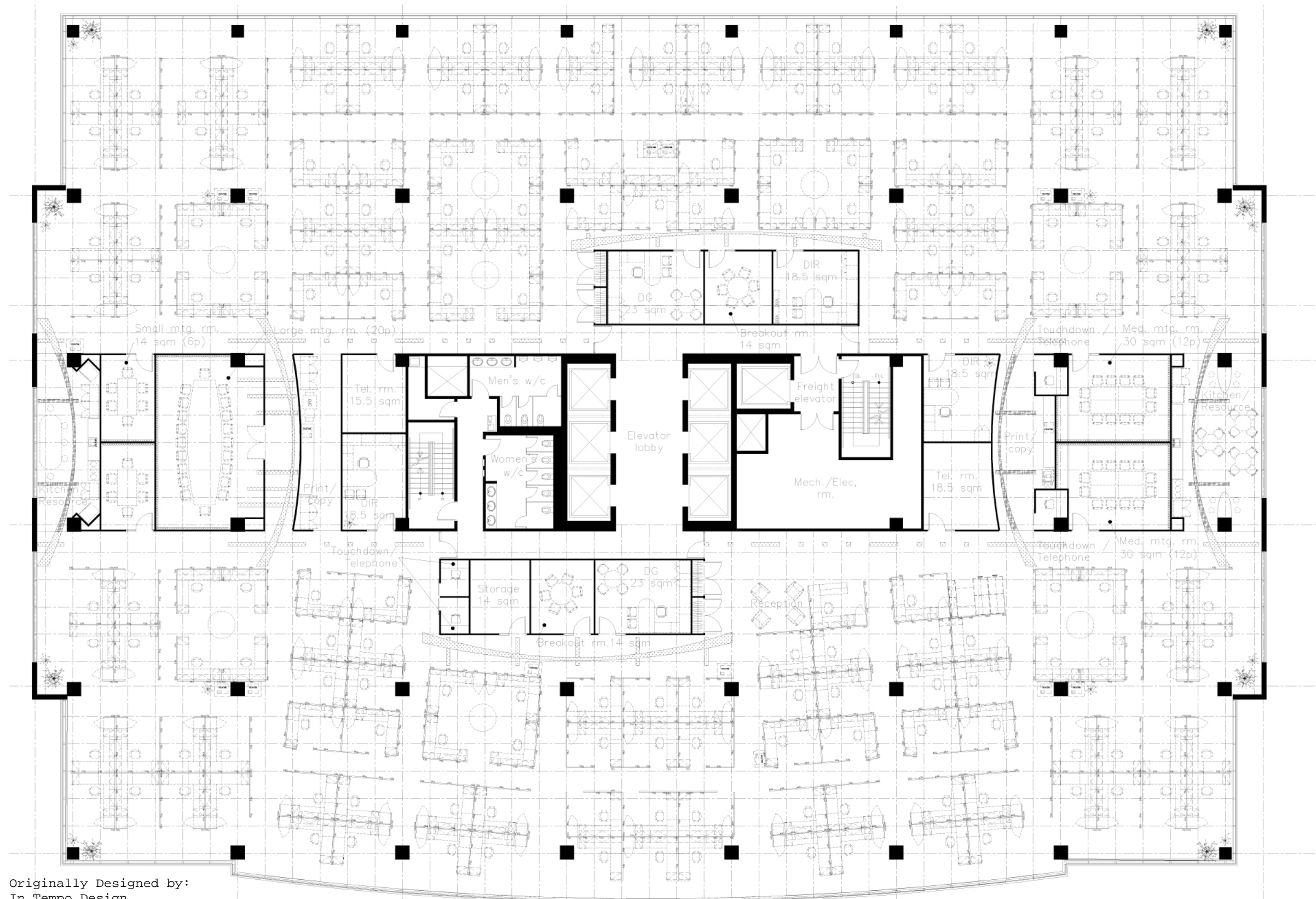
	Solid lines indicate PWGSC fit-up limit
	Dashed lines indicate tenant cost
	Hatch patterns indicate carpet inserts and resilient sheet flooring
	
	Curved lines indicate tackable/acoustical wall panels to meeting rooms (1 meter high panels mounted at approx. 1 meter AFF)

A5. Planning

Sample Plans

See chapter A3.3 for planning ratios and other requirements.

PL4 Diagram



Originally Designed by:
In Tempo Design

Drawn: Pascal Gendron
April 20, 2005



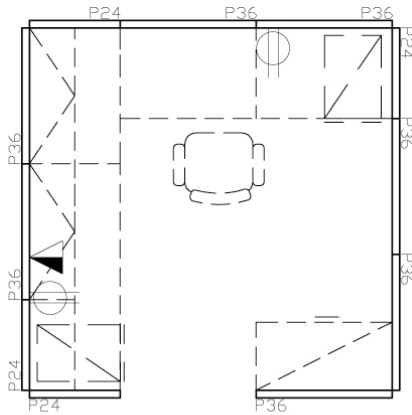
TAB A6. Sample Detail Drawings



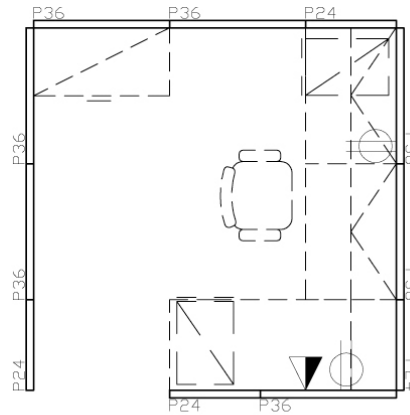
A6.1 Workstations and Offices

Typical Workstation Layout

minimum 5.9 m² (64 ft²)



LAYOUT (8X8)



ALTERNATE LAYOUT

Summary

Workstation accommodates average requirements for worksurface, shelving, storage and filing. The use of freestanding furniture components is encouraged for increased flexibility. Furniture layouts may vary.

All screens to be finished with standard grade fabric (see finish examples).

Height of filing cabinet may vary to suit workstation location (window locations – 2 high to allow for maximum transfer of natural light).

Standard Electrical Requirements

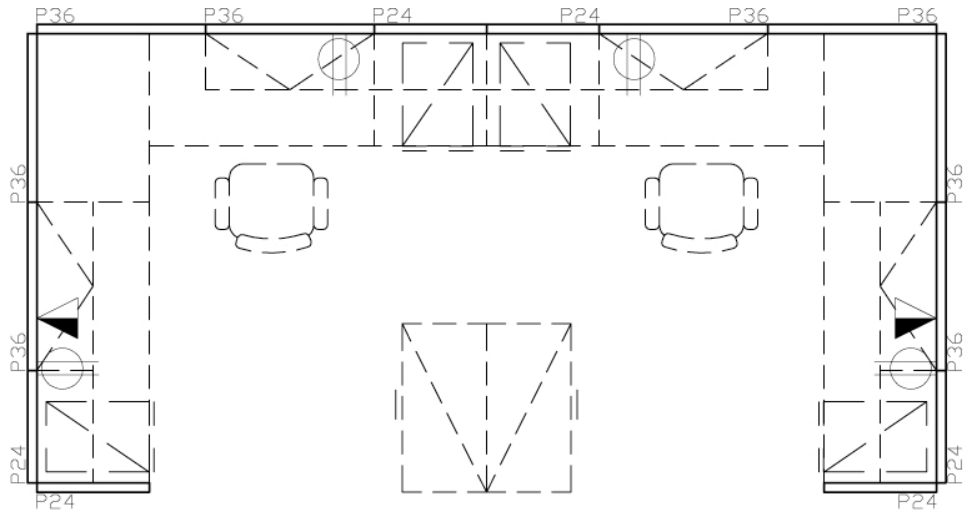
- 2 standard electrical duplex receptacles (1 circuit per 2 workstations)
- 1 image/voice/data/outlet (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)

A6. Sample Detail Drawings

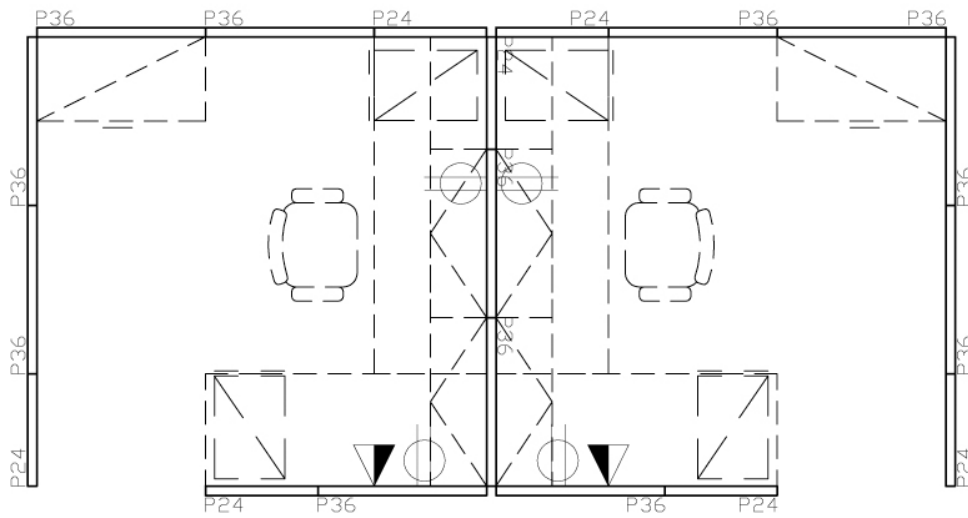
Workstations and
Offices

Typical Workstation Layout (cluster)

minimum 5.9 m² (64 ft²)



CLUSTER LAYOUT



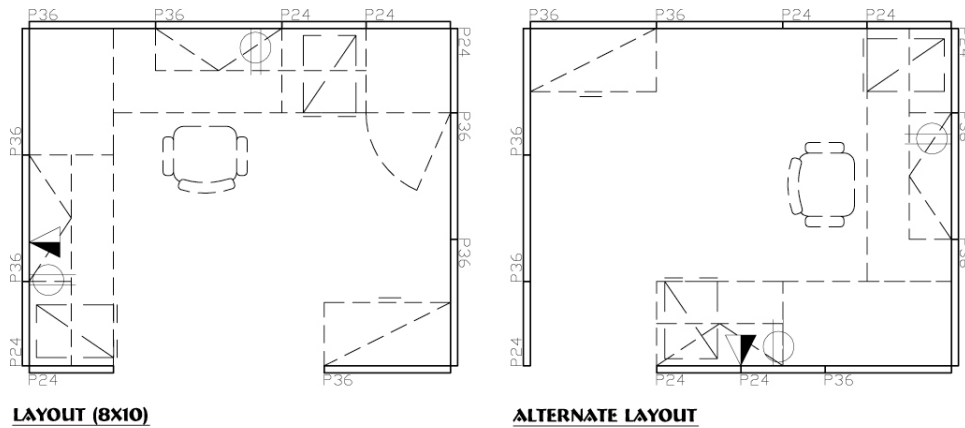
ALTERNATE CLUSTER LAYOUT

A6. Sample Detail Drawings

Workstations and Offices

Typical Workstation Layout

maximum 7.4 m² (80 ft²)



Summary

Workstation accommodates average requirements for worksurface, shelving, storage and filing. The use of freestanding furniture components is encouraged for increased flexibility. Furniture layouts may vary.

All screens to be finished with standard grade fabric (see finish examples).

Height of filing cabinet may vary to suit workstation location (window locations – two high to allow for maximum transfer of natural light).

Standard Electrical Requirements

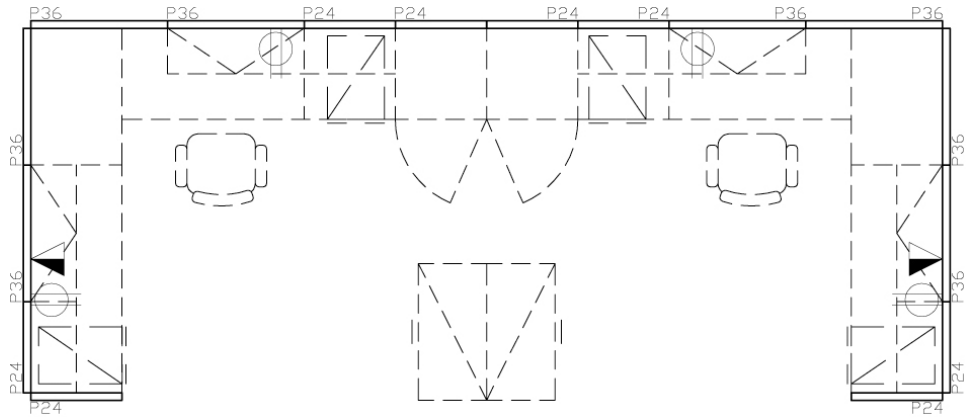
- 2 standard electrical duplex receptacles (1 circuit per 2 workstations)
- 1 image/voice/data/outlet (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)

A6. Sample Detail Drawings

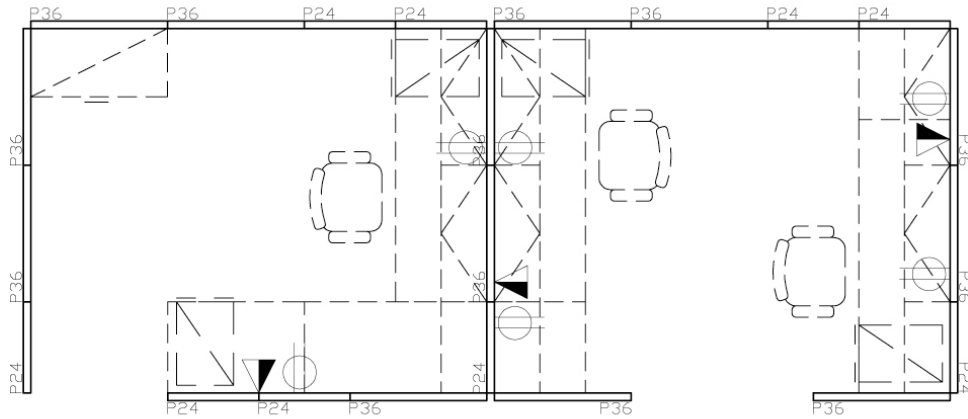
Workstations and
Offices

Typical Workstation Layout (cluster)

maximum 7.4 m² (80 ft²)



CLUSTER LAYOUT



ALTERNATE CLUSTER LAYOUT WITH SHARED W/S

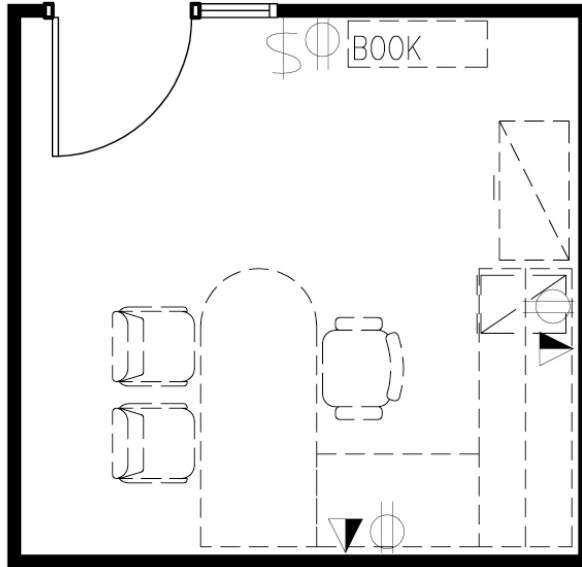
A6. Sample Detail Drawings

Workstations and
Offices

Typical Office Layout – Senior Departmental Representative

14 m² (150 ft²)

Note: Also for offices of EX-1 positions and equivalents, more than three levels below the DM, with ten or more funded reports – where space allows.



Summary

Office accommodates average requirements for worksurface, shelving, storage and filing. Furniture layouts may vary.

Standard Electrical Requirements

- 3 standard electrical duplex receptacles (2 circuits)
- 2 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

Standard Mechanical Requirements

Interior zone:

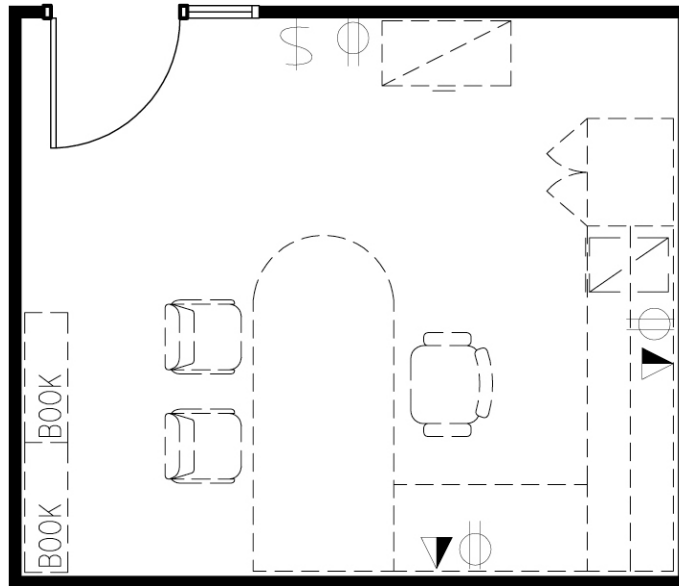
- individual thermostat control c/w dedicated terminal unit (VAV box, fan coil unit)
- supply and return air diffuser(s)/grille(s)

A6. Sample Detail
Drawings

Workstations and
Offices

Typical Office Layout – Director

maximum 18.5 m² (200 ft²)



Note : EX-2 and EX-1 positions and equivalents no more than 3 levels below the DM.

Summary

Office accommodates average requirements for worksurface, shelving, storage and filing. Furniture layouts may vary.

Standard Electrical Requirements

- 3 standard electrical duplex receptacles (2 circuits)
- 2 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

Standard Mechanical Requirements

Interior zone:

- individual thermostat control c/w dedicated terminal unit (VAV box, fan coil unit)
- supply and return air diffuser(s)/grille(s)
- transfer return air fan c/w on/off switch for full height partitions

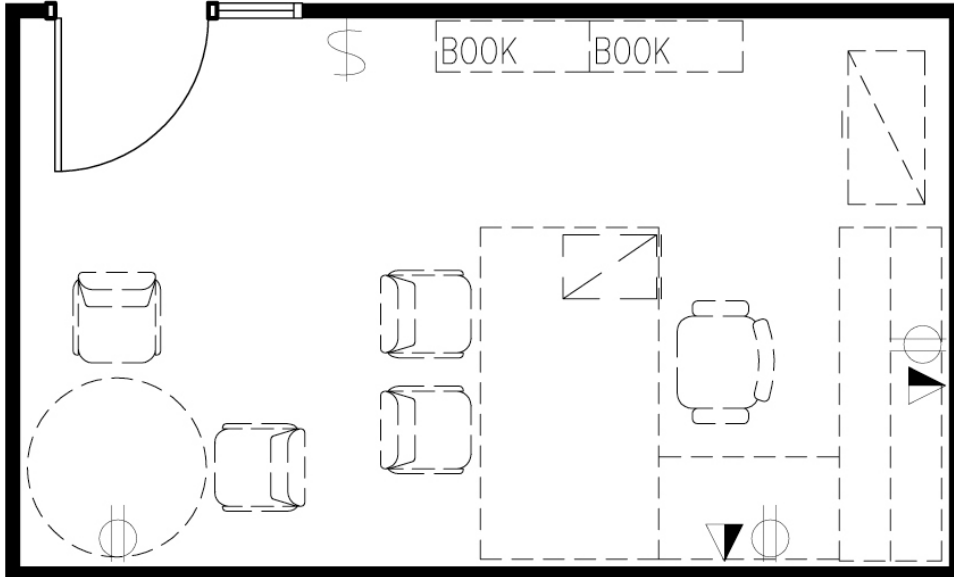
A6. Sample Detail Drawings

Workstations and Offices

Typical Office Layout (alternate) – Director

maximum 18.5 m² (200 ft²)

Note: EX-2 and EX-1 positions and equivalents no more than 3 levels below the DM.



Summary

Office accommodates average requirements for worksurface, shelving, storage and filing. Furniture layouts may vary.

Standard Electrical Requirements

- 3 standard electrical duplex receptacles (2 circuits)
- 2 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

Standard Mechanical Requirements

Interior zone:

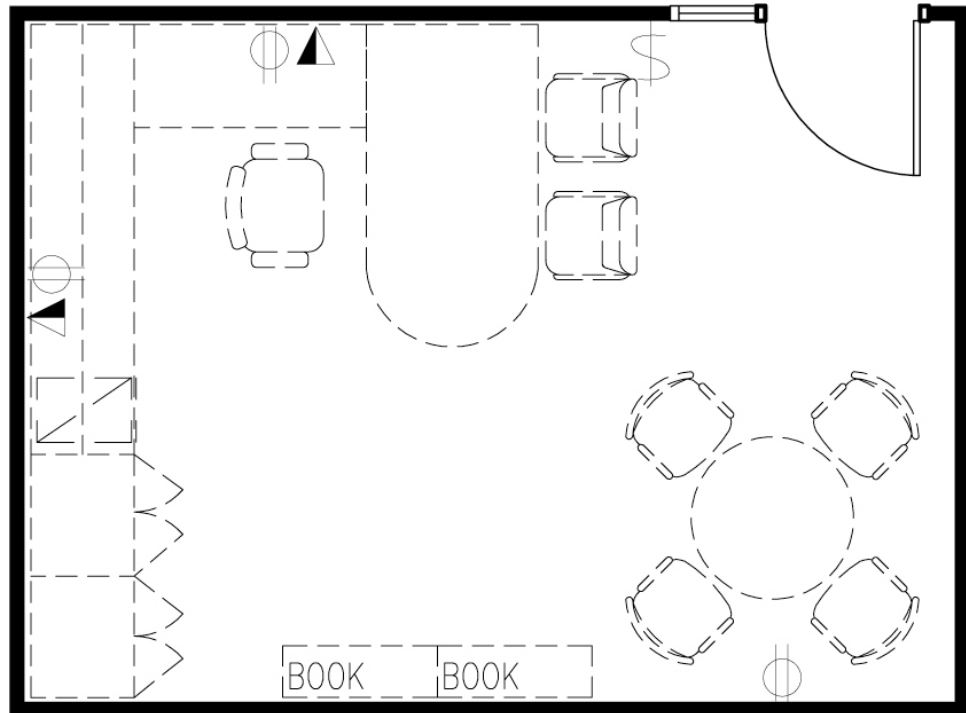
- individual thermostat control c/w dedicated terminal unit (VAV box, fan coil unit)
- supply and return air diffuser(s)/grille(s)
- transfer return air fan c/w on/off switch for full height partitions

A6. Sample Detail
Drawings

Workstations and
Offices

Typical Office Layout – Director General

maximum 23 m² (247.5 ft²)



Summary

Office accommodates average requirements for worksurface, shelving, storage and filing. Furniture layouts may vary.

Standard Electrical Requirements

- 3 standard electrical duplex receptacles (2 circuits)
- 2 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

Standard Mechanical Requirements

Interior zone:

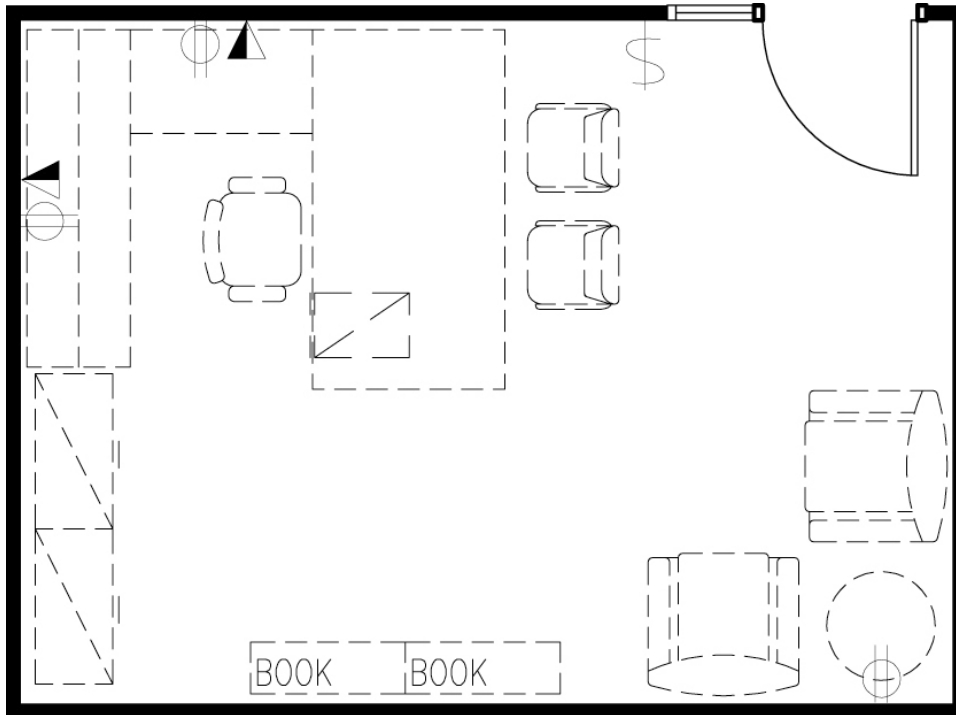
- individual thermostat control c/w dedicated terminal unit (VAV box, fan coil unit)
- supply and return air diffuser(s)/grille(s)
- transfer return air fan c/w on/off switch for full height partitions

A6. Sample Detail Drawings

Workstations and
Offices

Typical Office Layout (alternate) – Director General

maximum 23 m² (247.5 ft²)



Summary

Office accommodates average requirements for worksurface, shelving, storage and filing. Furniture layouts may vary.

Standard Electrical Requirements

- 3 standard electrical duplex receptacles (2 circuits)
- 2 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

Standard Mechanical Requirements

Interior zone:

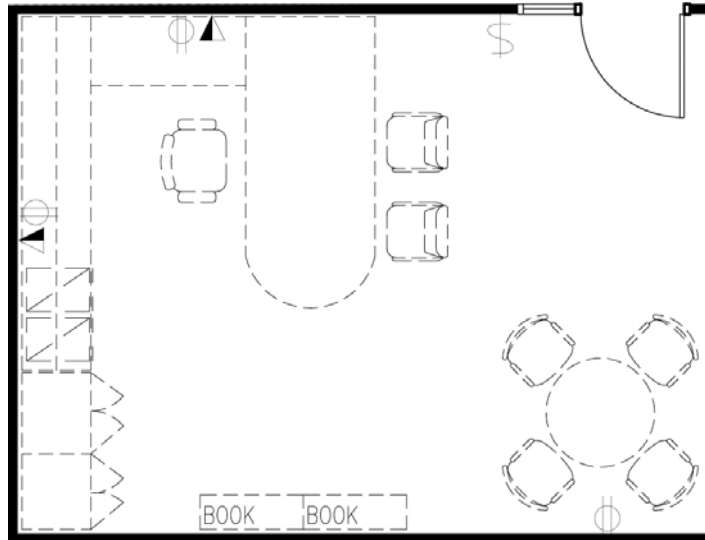
- individual thermostat control c/w dedicated terminal unit (VAV box, fan coil unit)
- supply and return air diffuser(s)/grille(s)
- transfer return air fan c/w on/off switch for full height partitions

A6. Sample Detail
Drawings

Workstations and
Offices

Typical Office Layout – Assistant Deputy Minister

maximum 28 m² (301 ft²)



Summary

Office accommodates average requirements for worksurface, shelving, storage and filing. Furniture layouts may vary.

Standard Electrical Requirements

- 3 standard electrical duplex receptacles (2 circuits)
- 2 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

Standard Mechanical Requirements

Interior zone:

- individual thermostat control c/w dedicated terminal unit (VAV box, fan coil unit)
- supply and return air diffuser(s)/grille(s)
- transfer return air fan c/w on/off switch for full height partitions

Perimeter zone:

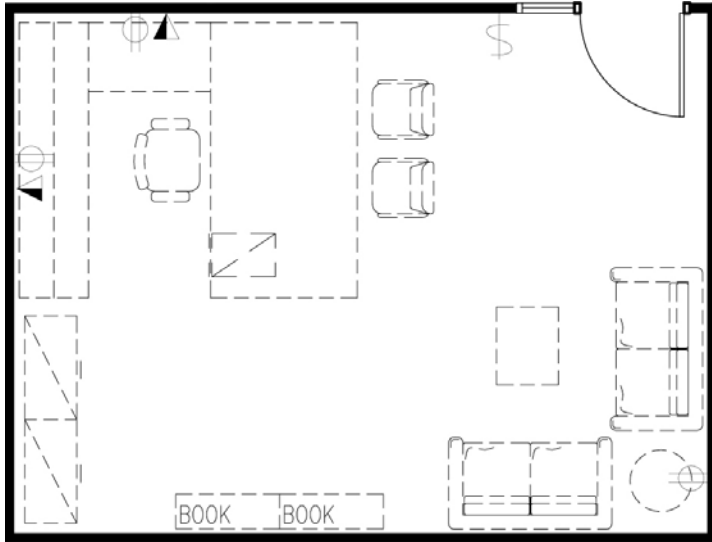
- individual thermostat control for terminal units and perimeter system (convactor(s), fan coil unit(s))
- transfer return air fan c/w on/off switch for full height partitions
- supply and return air diffuser(s)/grille(s)
- noise abatement as required

A6. Sample Detail Drawings

Workstations and Offices

Typical Office Layout (alternate) – Assistant Deputy Minister

maximum 28 m² (301 ft²)



Summary

Office accommodates average requirements for worksurface, shelving, storage and filing. Furniture layouts may vary.

Standard Electrical Requirements

- 3 standard electrical duplex receptacles (2 circuits)
- 2 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

Standard Mechanical Requirements

Interior zone:

- individual thermostat control c/w dedicated terminal unit (VAV box, fan coil unit)
- supply and return air diffuser(s)/grille(s)
- transfer return air fan c/w on/off switch for full height partitions

Perimeter zone:

- individual thermostat control for terminal units and perimeter system (convector(s), fan coil unit(s))
- transfer return air fan c/w on/off switch for full height partitions
- supply and return air diffuser(s)/grille(s)
- noise abatement as required

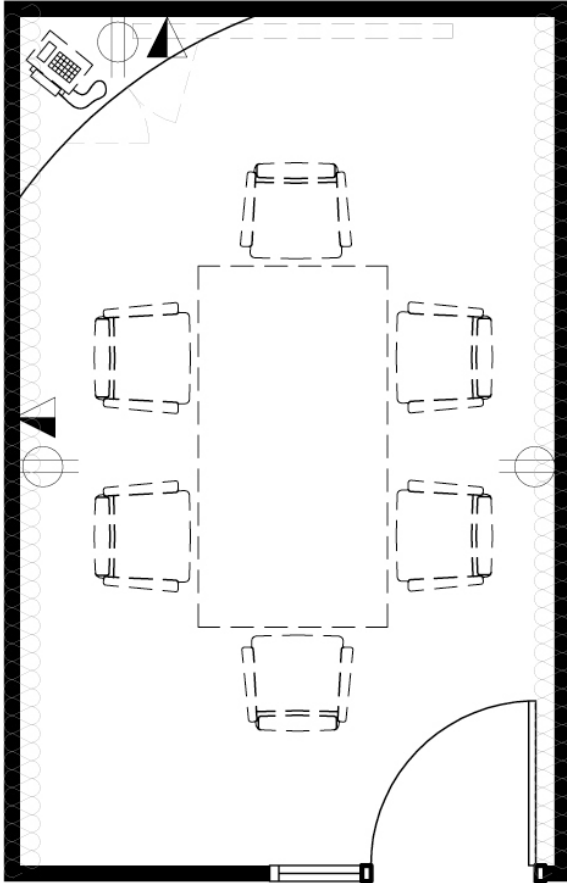
A6. Sample Detail Drawings

Workstations and
Offices

A6.2 Support Spaces

Small Meeting Room

14 m² (150 ft²)



Summary

Small meeting room accommodates meeting table, chairs for 6 people and AV board. The room size should allow for comfortable circulation space and room for a presenter to function comfortably at one end.

Small counter with lockable storage provided. Millwork finishes to be standard laminate with PVC, postformed or self edge.

Standard Electrical Requirements

- 3 standard electrical duplex receptacles (2 circuits)
- 2 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

A6. Sample Detail
Drawings

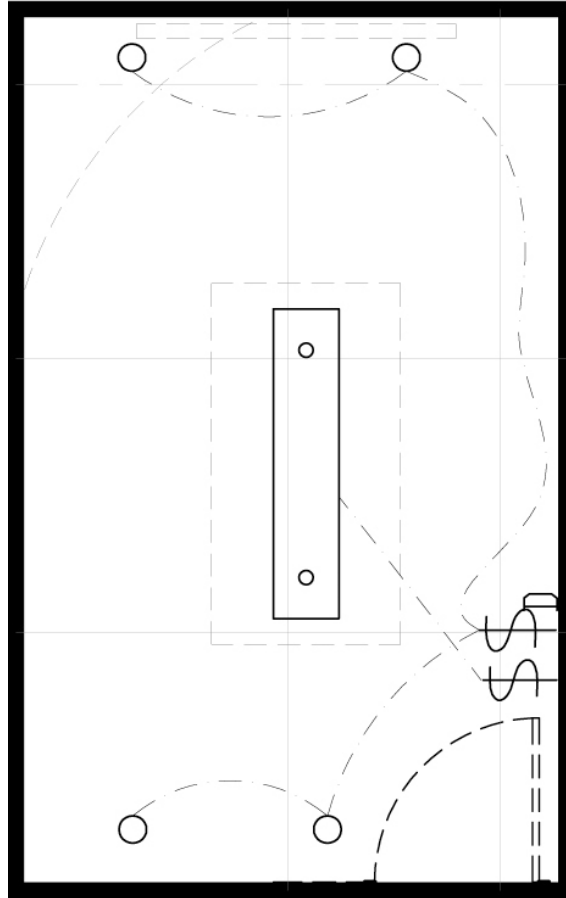
Support Spaces

Standard Mechanical Requirements

- dedicated thermostat control c/w dedicated terminal unit
- supply and return air diffuser(s)/grille(s)
- return air transfer fan c/w on/off switch for full height partitions
- increased ventilation

Small Meeting Room (reflected ceiling)

14 m² (150 ft²)

**Summary**

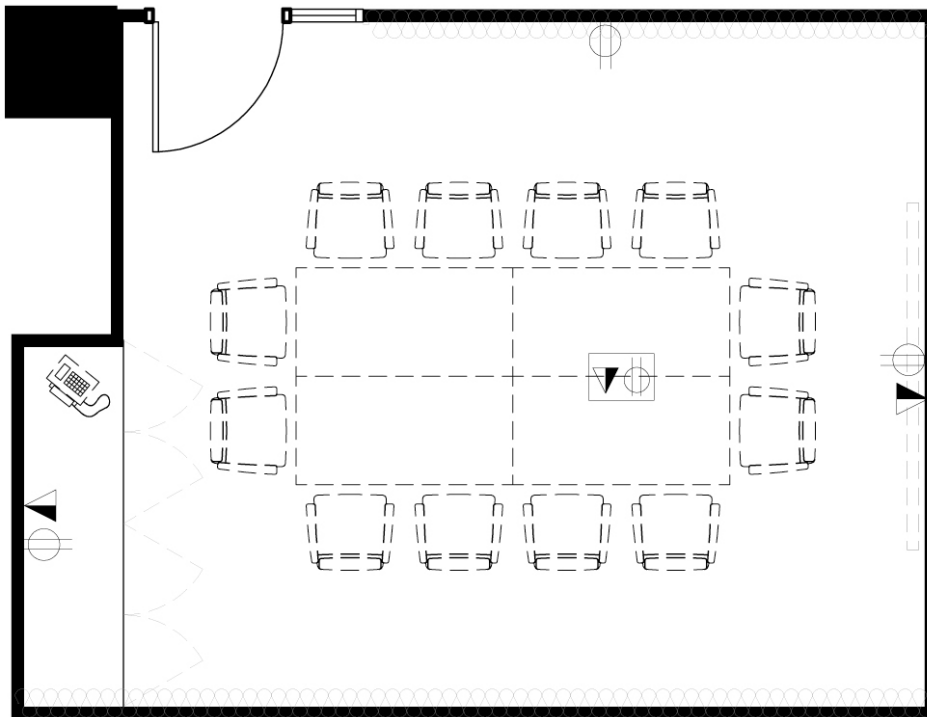
Small meeting room lighting to include over table fixture to suit on a separate switch and dimmable accent lighting.

A6. Sample Detail Drawings

Support Spaces

Medium Meeting Room

30 m² (325 ft²)



Summary

Medium meeting room accommodates meeting table, chairs for 12 people and AV board. The room size should allow for comfortable circulation space and room for a presenter to function comfortably at one end.

Counter with lockable storage provided. Millwork finishes to be standard laminate with PVC, postformed or self edge.

Standard Electrical Requirements

- 4 standard electrical duplex receptacles (2 circuits); 1 only floor mounted
- 3 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks); 1 only floor mounted
- 1 separate switch/light control

Standard Mechanical Requirements

- dedicated thermostat control c/w dedicated terminal unit
- supply and return air diffuser(s)/grille(s)

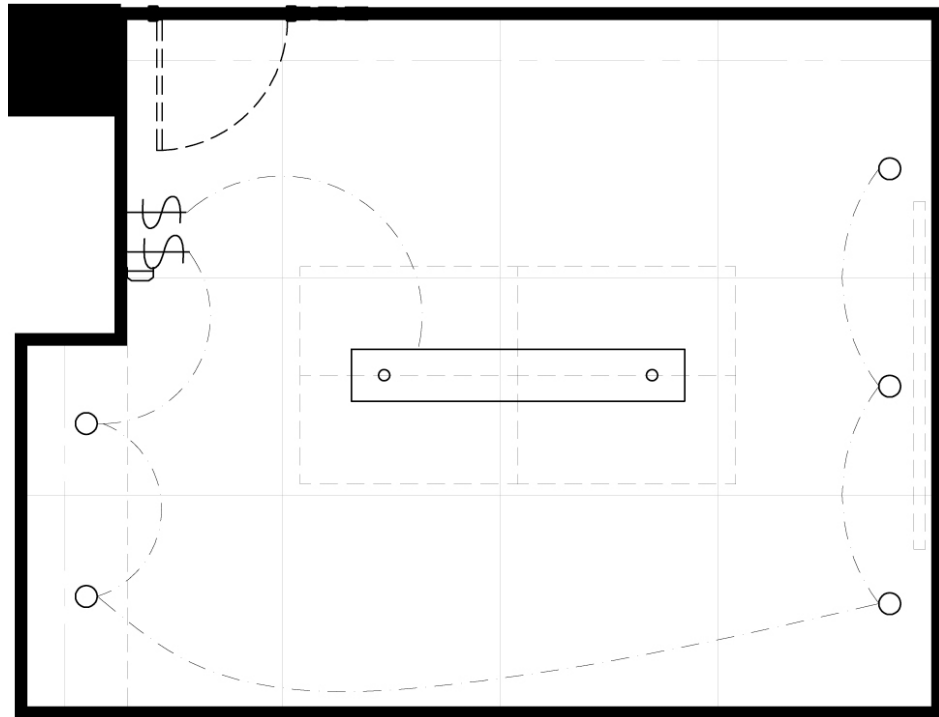
A6. Sample Detail
Drawings

Support Spaces

- return air transfer fan c/w on/off switch for full height partitions
- extra cooling unit, if required
- extra ventilation to meet ventilation demand c/w controls and CO₂ monitoring, if applicable
- noise control to maintain required noise rating

Medium Meeting Room (reflected ceiling)

30 m² (325 ft²)



Summary

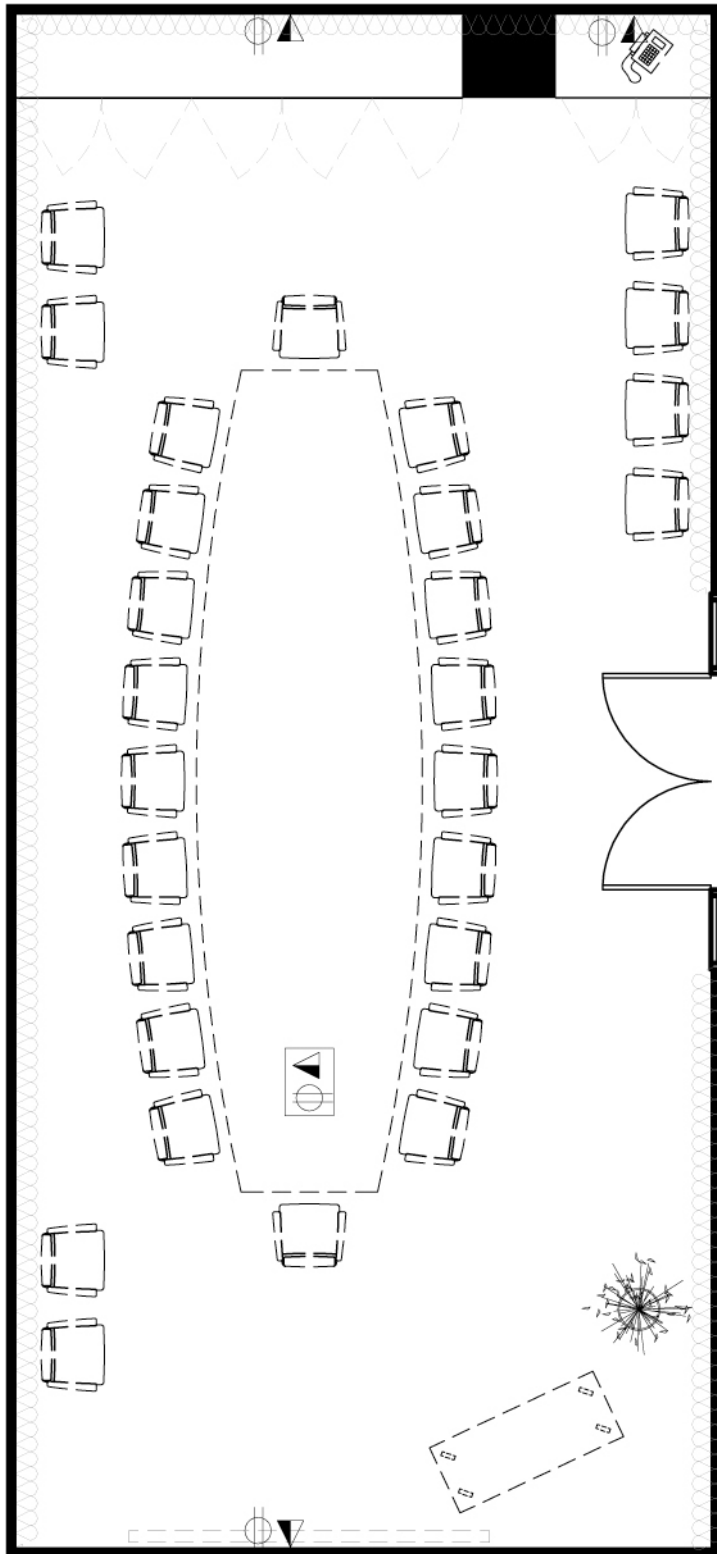
Medium meeting room lighting to include over table fixture to suit on a separate switch and dimmable accent lighting.

A6. Sample Detail Drawings

Support Spaces

Large Meeting Room

68.8 m² (740 ft²)



A6. Sample Detail
Drawings

Support Spaces

Summary

Large meeting room accommodates meeting table, chairs for 20 people and presenter's equipment and materials. The room size should allow for comfortable circulation space and room for a presenter to function comfortably at one end.

Counter with lockable storage provided. Millwork finishes to be standard laminate with PVC, postformed or self edge.

Standard Electrical Requirements

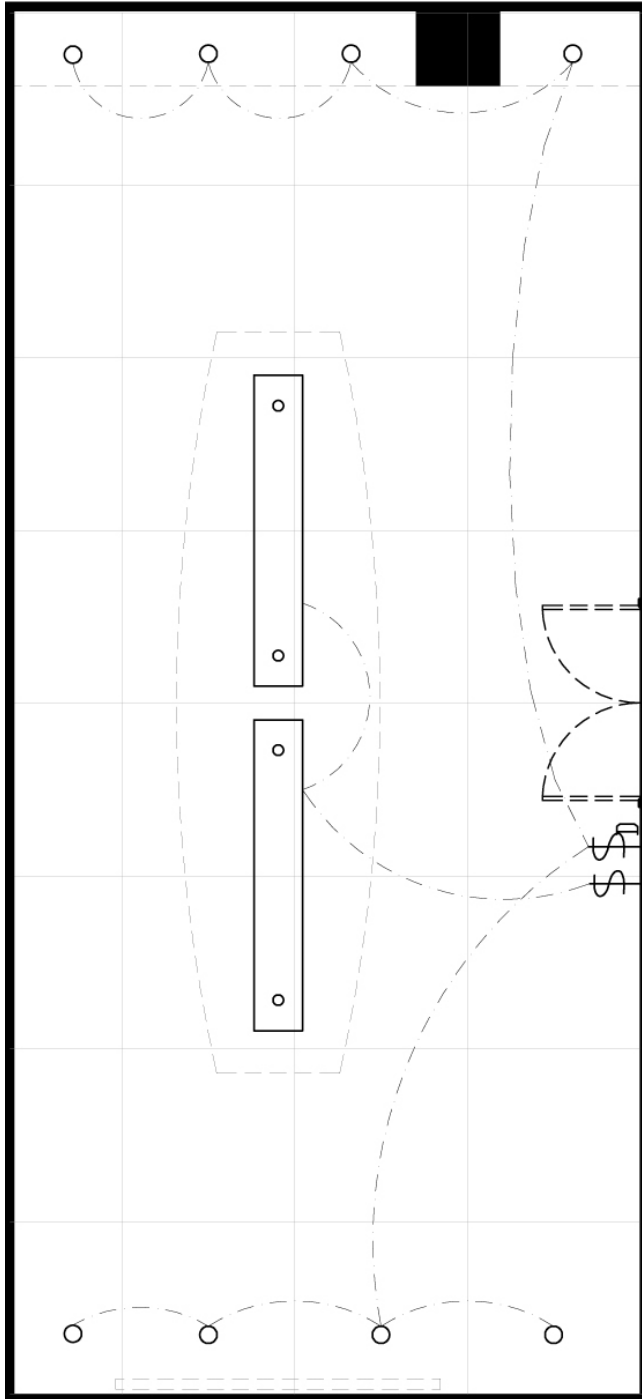
- 4 standard electrical duplex receptacles (two circuits); 1 only floor mounted
- 4 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks); 1 only floor mounted
- 1 separate switch/light control

Standard Mechanical Requirements

- dedicated thermostat control c/w dedicated terminal unit
- supply and return air diffuser(s)/grille(s)
- return air transfer fan c/w on/off switch for full height partitions
- extra cooling unit, if required
- extra ventilation to meet ventilation demand c/w controls and CO₂ monitoring, if applicable
- noise control to maintain required noise rating

**A6. Sample Detail
Drawings**

Support Spaces

Large Meeting Room (reflected ceiling)68.8 m² (740 ft²)**Summary**

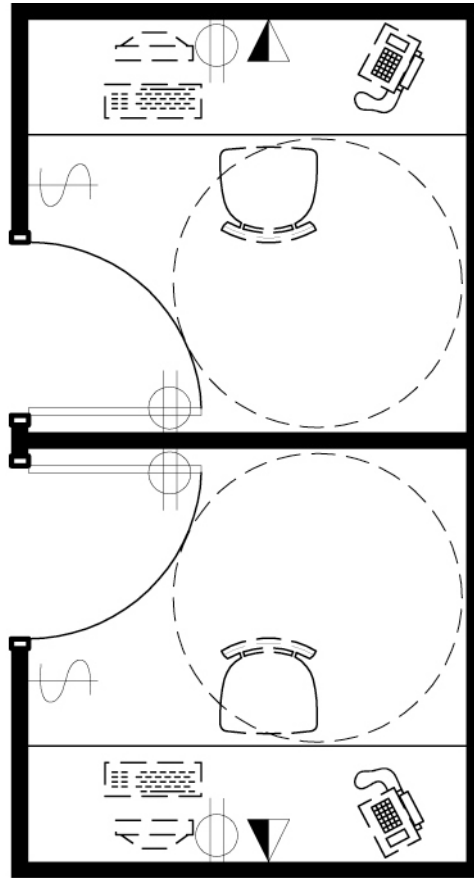
Large meeting room lighting to include over table fixture to suit on a separate switch and dimmable accent lighting.

A6. Sample Detail Drawings

Support Spaces

Quiet/Touchdown Room

5 m² (54 ft²)



Summary

Worksurface for computer and telephone provided.

Worksurface finishes to be standard laminate with PVC, postformed or self edge.

Standard Electrical Requirements

- 2 standard electrical duplex receptacles (1 circuit)
- 1 image/voice/data outlet (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)
- 1 separate switch/light control

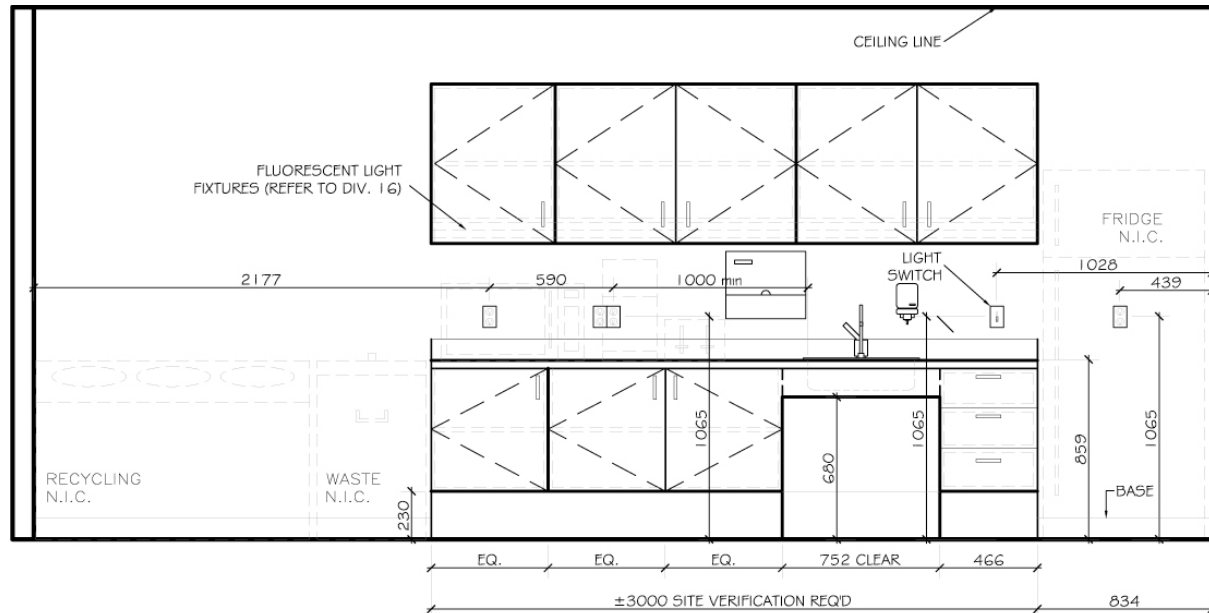
Standard Mechanical Requirements

- supply and return air diffuser(s)/grille(s)

A6. Sample Detail
Drawings

Support Spaces

Typical Kitchenette Millwork (elevation)



Summary

Area accommodates average storage requirements, recycling centre and trash as well as a full size fridge and countertop appliances (appliances not included). Design allows for barrier-free access to sink. Paper towel and soap dispensers provided.

All worksurface finishes to be standard laminate with PVC, postformed or self edge.

Standard Electrical Requirements

- 2 standard dedicated circuit duplex receptacles (microwave and fridge)
- 2 standard split circuit duplex receptacles for other countertop appliances
- 1 separate switch/light control for under cabinet lighting

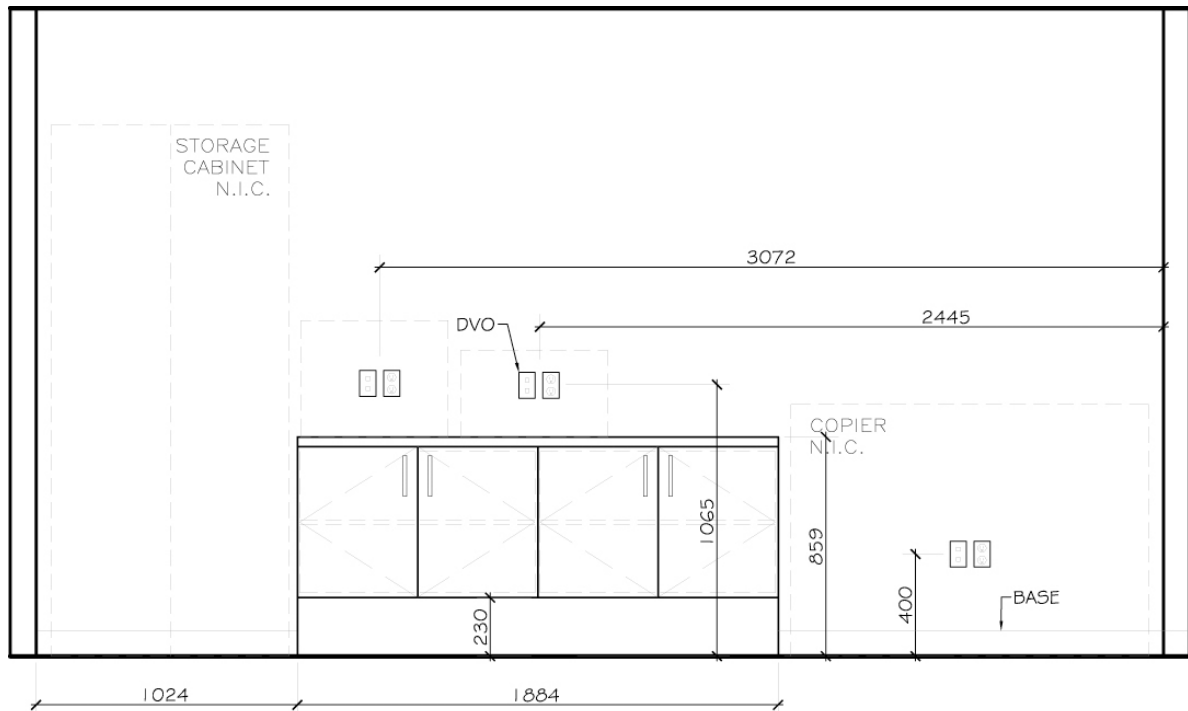
Standard Mechanical Requirements

- hot water, cold water, drain and vent piping for kitchen sink
- kitchen exhaust fan c/w on/off switch (exhaust to exterior if economical and feasible)
- supply air diffuser(s) and grilles(s)
- no return air to base building system

A6. Sample Detail
Drawings

Support Spaces

Typical Shared Equipment Area Millwork (elevation)



Summary

Area accommodates average requirements for storage, photocopier, printer and fax. (Storage cabinet and equipment not included.)

Overhead storage is not provided but kitchenette overhangs may be substituted here (modified to suit).

All worksurface finishes to be standard laminate with PVC, postformed or self edge.

Standard Electrical Requirements

- 3 electrical duplex receptacles to meet specific equipment needs
- 3 image/voice/data outlets (Note: customer to provide actual connectors and jacks, typically RJ45 with multiple jacks)

Standard Mechanical Requirements

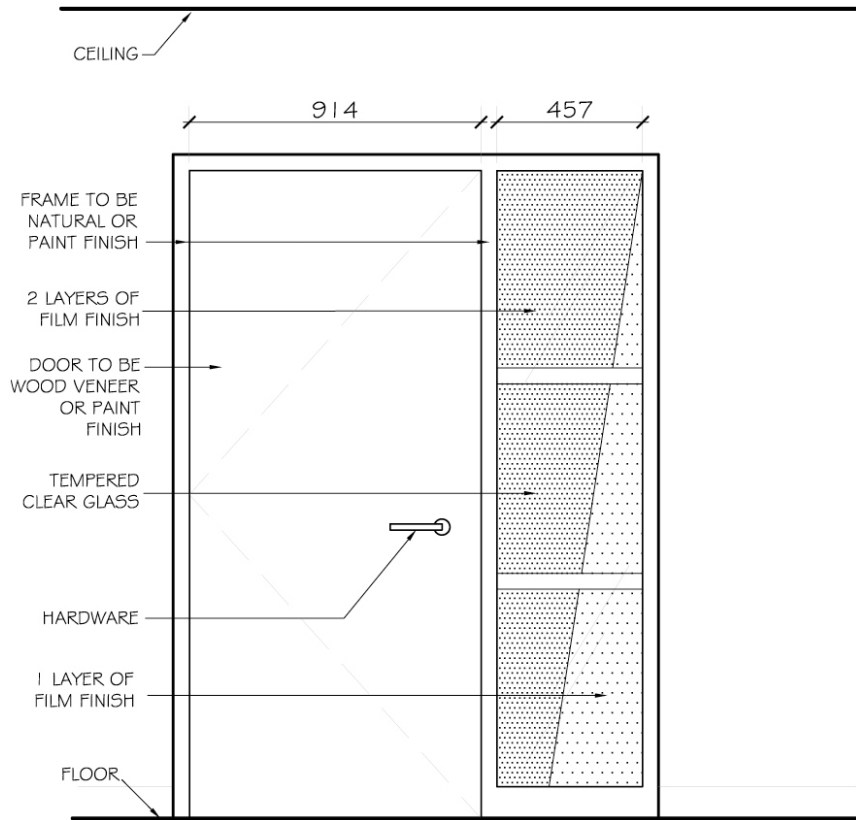
- exhaust for photocopier to exterior
- supply air diffuser(s) and grilles(s)

A6. Sample Detail Drawings

Support Spaces

A6.3 Doors and Glazing

Typical Door with Sidelight – Office or Meeting Room

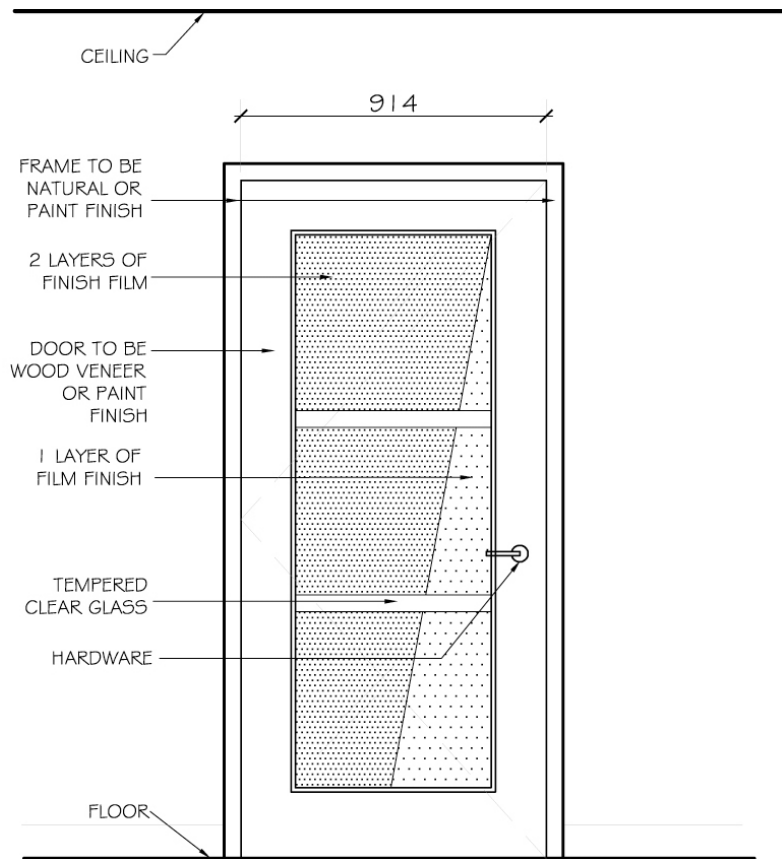


Note: Film treatment shown is example only. Pattern may vary but must endure change in occupancy. (No logos or departmental specific identification.)

A6. Sample Detail
Drawings

Doors and Glazing

Typical Door with Glazing – Quiet Room or Small Meeting Room

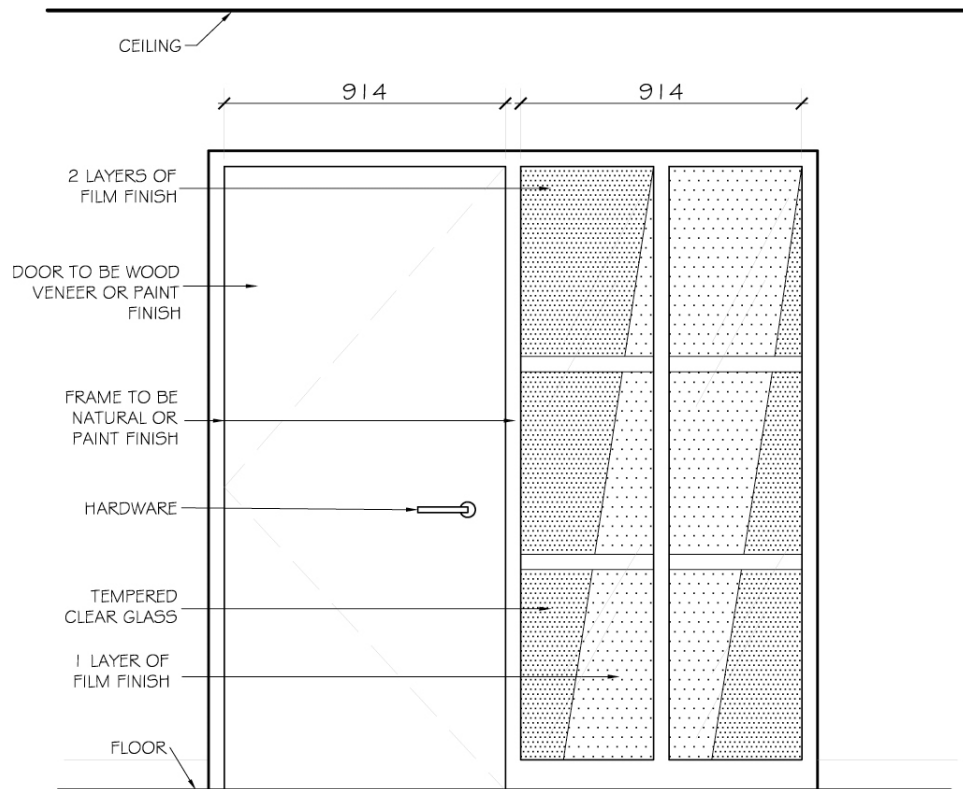


Note: Film treatment shown is example only. Pattern may vary but must endure change in occupancy. (No logos or departmental specific identification.)

A6. Sample Detail Drawings

Doors and Glazing

Typical Door with Double Sidelight – Assistant Deputy Minister’s Office

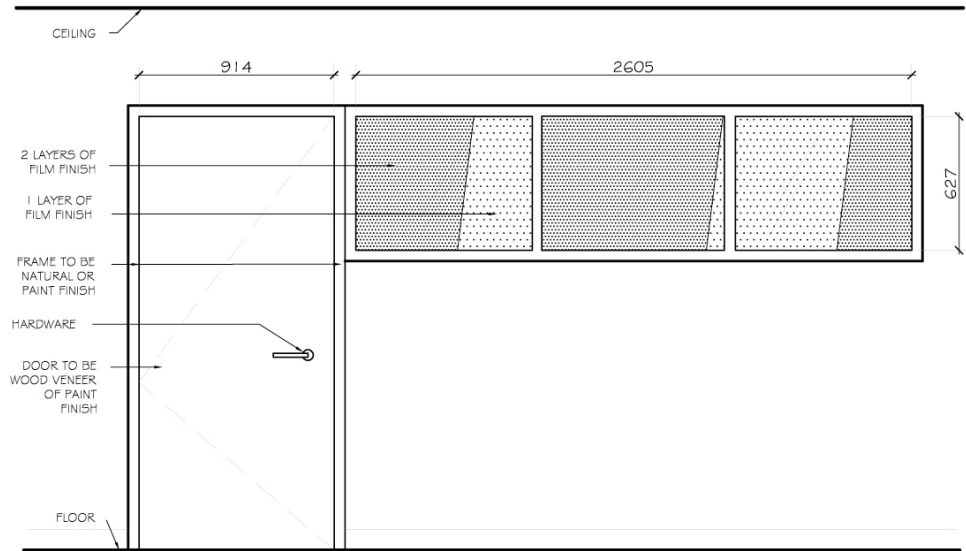


Note: Film treatment shown is example only. Pattern may vary but must endure change in occupancy. (No logos or departmental specific identification.)

A6. Sample Detail
Drawings

Doors and Glazing

Typical Door with Clerestory – Resource Room or Similar Application



Note: Film treatment shown is example only. Pattern may vary but must endure change in occupancy. (No logos or departmental specific identification.)

A6. Sample Detail Drawings

Doors and Glazing



TAB A7. Finishes



A7.1 Overview

Examples of finishes are included in Chapter A7.2. These examples are not intended to limit colour and material choices to those shown but rather to demonstrate the variety of "looks" achievable within the typical range of finish materials used in an office environment, and to illustrate the general quality and characteristics of those materials. The accompanying legends provide a generic description of each material and in particular those attributes that contribute to their identification as a more "sustainable" choice. As the overall reduction of materials is of primary importance, substrate surfaces should remain "unfinished" wherever suitable (e.g. concrete columns, storage room floors, etc.).

Selection Criteria

Standard materials are of a midrange quality and selected to provide best value for money based on a ten-year life-cycle costing analysis. Finishes are chosen for their durability (low maintenance/life cycle cost), recyclability, low embodied energy (locally available if possible), and low toxicity.

Colour

Lighter colours are used on large wall, screen and ceiling surfaces to reflect as much natural light as possible. Stronger accent colours are used in smaller quantities to create interest without significantly increasing the level of volatile organic compounds (VOCs) or having an adverse effect on light levels.

Carpet

Although floor finishes are generally a base building component, carpet and resilient flooring are included in the finish examples as they are commonly selected and installed as part of a fit-up or refinishing project.

The finish examples include the use of both conventional roll goods (broadloom) and carpet tile. Roll goods generally offer the best front-end value in new construction scenarios where the space is not occupied. However, under these conditions, if the occupancy is long term (more than five years), carpet tile may be considered for use in the major circulation paths and high use areas, in combination with roll goods in the general office areas, to facilitate replacement if damaged or worn.

A7. Finishes

Overview

In occupied areas, where carpet must be replaced (generally after 10-15 years), it may be possible to make a business case to support the use of carpet tile. If the costs of dismantling and reassembling furniture systems can be avoided through the use of furniture lift systems and carpet tile, the total cost of carpet replacement can be equal to or less than a conventional roll goods installation.

A7. Finishes

Overview

A7.2 Examples

Finishes Legend

Example 1 (see illustrations on the next two pages)

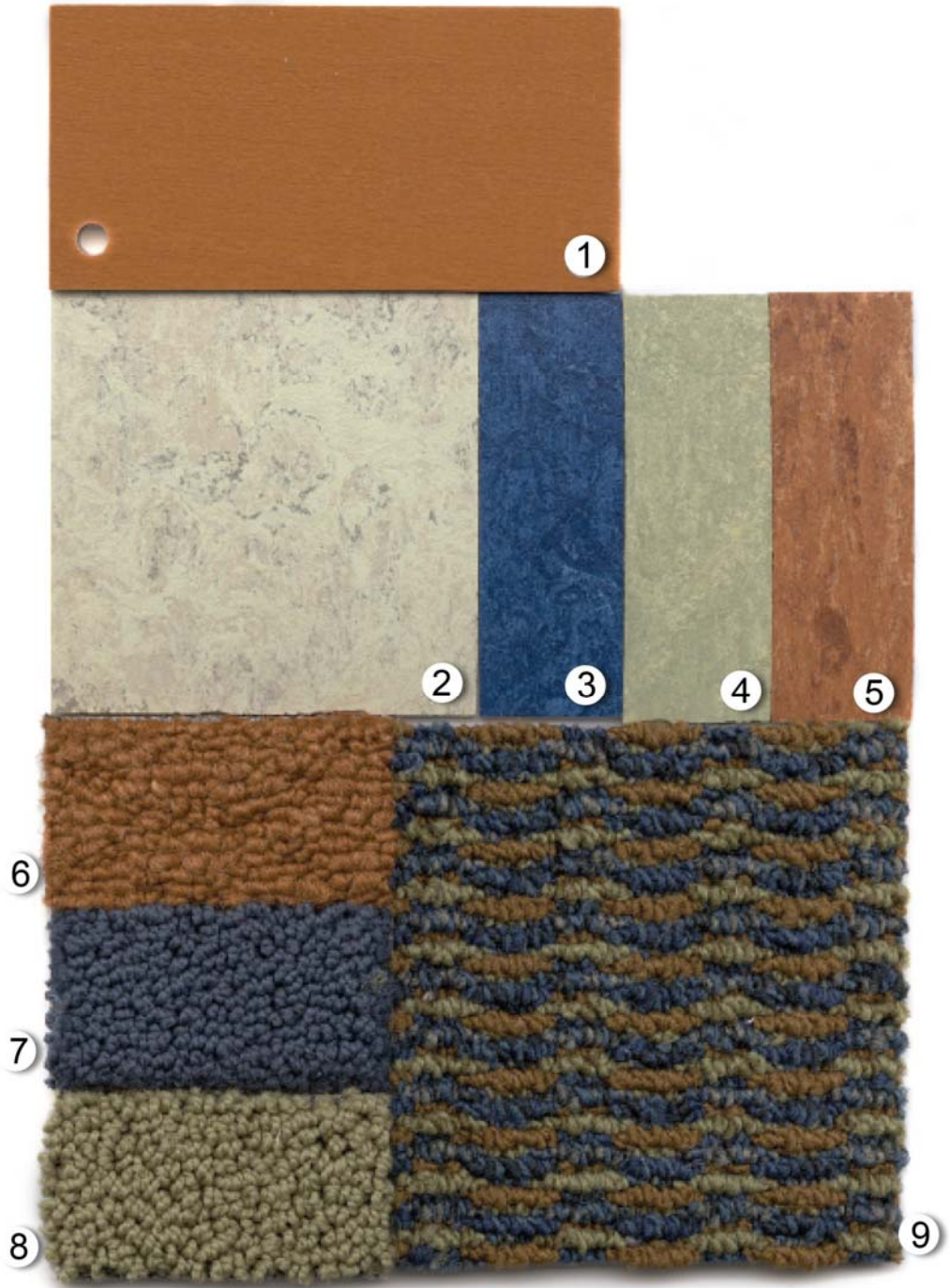
1. Wood Stain: pear wood on beech
2. Linoleum Field: 2.5 mm gauge, marbleized, installed with solvent-free adhesive
3. Linoleum Accent 1: as above
4. Linoleum Accent 2: as above
5. Linoleum Accent 3: as above
6. Accent Carpet 1: tufted textured loop, bulk continuous filament nylon, piece dyed, 28 oz, permanently antistatic and soil-resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program, installed with certified low VOC adhesive
7. Accent Carpet 2: tufted textured loop, bulk continuous filament nylon, piece dyed, 32 oz, permanently antistatic and soil-resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program, installed with certified low VOC adhesive
8. Accent Carpet 3: tufted textured loop, bulk continuous filament nylon, piece dyed, 32 oz, permanently antistatic and soil-resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program, installed with certified low VOC adhesive
9. Field Carpet: tufted patterned loop, bulk continuous filament nylon, solution dyed, 28 oz, permanently antistatic and soil-resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program, installed with certified low VOC adhesive
10. Paint Field 1: water-based, low odor, low VOC, washable, EcoLogo, certified by the Environmental Choice Program
11. Paint Field 2: water-based, as above
12. Paint Accent 1: water-based, as above
13. Paint Accent 2: water-based, as above
14. Paint Accent 3: water-based, as above
15. Wallcovering: manufactured from 100% organic fibres and substrates using water-based dyes, installed with water-based, low VOC adhesive
16. Panel Fabric Field: manufactured from 100% recycled materials
17. Panel Fabric Accent: manufactured from 100% recycled materials

A7. Finishes

Examples

- 18. High Pressure Plastic Laminate 1: horizontal general-purpose grade, textured finish
- 19. High Pressure Plastic Laminate 2: as above
- 20. High Pressure Plastic Laminate 3: as above
- 21. High Pressure Plastic Laminate 4: as above
- 22. High Pressure Plastic Laminate 5: as above

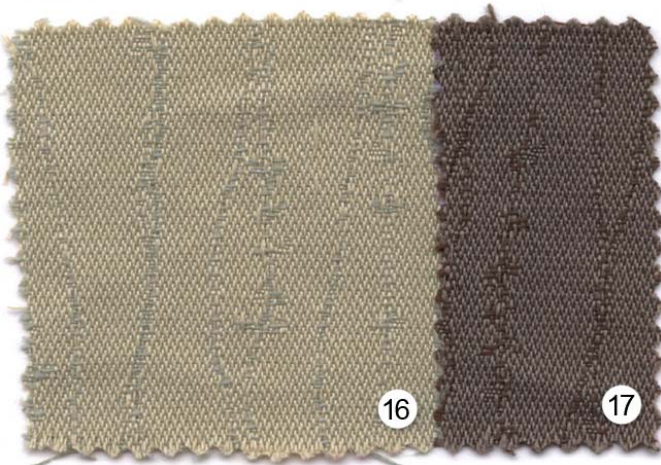
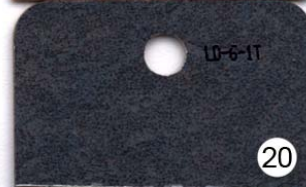
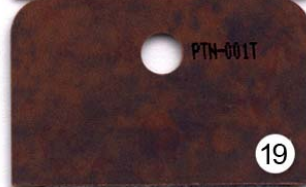
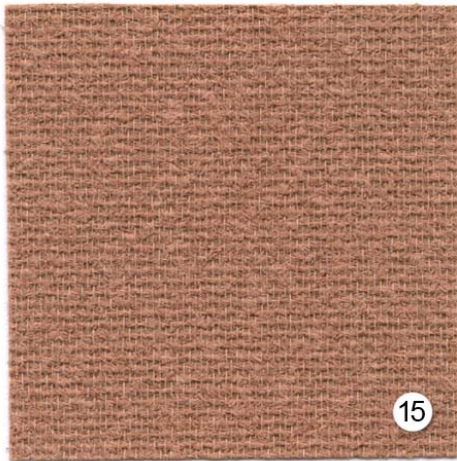
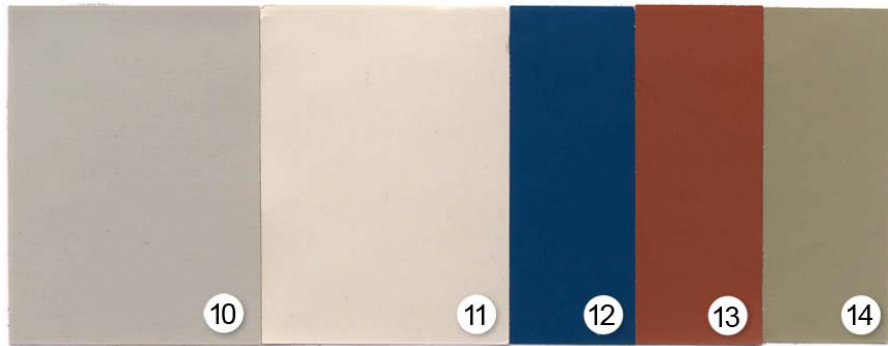
Example 1A



A7. Finishes

Examples

Example 1B



A7. Finishes

Examples

Finishes Legend

Example 2 (see illustrations on the next two pages)

1. Wood Stain: clear on maple
2. Linoleum Field: 2.5 mm gauge, marbleized, installed with solvent-free adhesive
3. Linoleum Accent 1: as above
4. Linoleum Accent 2: as above
5. Linoleum Accent 3: as above
6. Accent Carpet 1: tufted textured loop, bulk continuous filament nylon, piece dyed, 28 oz, permanently antistatic and soil-resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program, installed with certified low VOC adhesive
7. Accent Carpet 2: tufted textured loop, bulk continuous filament nylon, piece dyed, 28 oz, permanently antistatic and soil-resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program, installed with certified low VOC adhesive
8. Accent Carpet 3: tufted textured loop, bulk continuous filament nylon, piece dyed, 32 oz, permanently antistatic and soil-resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program, installed with certified low VOC adhesive
9. Field Carpet: tufted random patterned loop, bulk continuous filament nylon, solution dyed, 28 oz, permanently antistatic and soil-resistant, produced with 100% recyclable fibre, CRI Green Label certification, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program, installed with certified low VOC adhesive
10. Paint Field 1: water-based, low odor, low VOC, washable, EcoLogo, certified by the Environmental Choice Program
11. Paint Field 2: water-based, as above
12. Paint Accent 1: water-based, as above
13. Paint Accent 2: water-based, as above
14. Paint Accent 3: water-based, as above
15. Wallcovering: manufactured from 100% organic fibres and substrates using water-based dyes, installed with water-based, low VOC adhesive
16. Panel Fabric Field: manufactured from 100% recycled materials
17. Panel Fabric Accent: manufactured from 100% recycled materials
18. High Pressure Plastic Laminate 1: horizontal general-purpose grade, textured finish

A7. Finishes

Examples

19. High Pressure Plastic Laminate 2: as above
20. High Pressure Plastic Laminate 3: as above
21. High Pressure Plastic Laminate 4: as above
22. High Pressure Plastic Laminate 5: as above

Example 2A**A7. Finishes**

Examples

Example 2B



A7. Finishes

Examples

Finishes Legend

Example 3 (see illustrations on the next two pages)

1. Wood Stain: clear on cherry
2. Linoleum Field: 2.5 mm gauge, marbled, installed with solvent-free adhesive
3. Linoleum Accent 1: as above
4. Linoleum Accent 2: as above
5. Linoleum Accent 3: as above
6. Accent Carpet Tile 1: tufted textured loop, bulk continuous filament nylon, piece dyed, 32 oz, permanently antistatic and soil resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program
7. Accent Carpet Tile 2: tufted textured loop, bulk continuous filament nylon, piece dyed, 32 oz, permanently antistatic and soil resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program
8. Accent Carpet Tile 3: tufted textured loop, bulk continuous filament nylon, piece dyed, 32 oz, permanently antistatic and soil resistant, produced with 100% recyclable fibre, EPP certification, certified by SCS, ISO 14001 certified, ISO 9001 certified, reclamation program
9. Field Carpet Tile: textured loop, 500 mm x 500 mm, bulk continuous filament nylon, 100% yarn dyed, permanently antistatic and soil resistant, minimum 31% recycled content, CRI Green Label Certification, ECO logo, EPP certification, ISO 14001 certified, ISO 9001 certified, reclamation program
10. Paint Field 1: water-based, low odor, low VOC, washable, EcoLogo, certified by the Environmental Choice Program
11. Paint Field 2: water-based, as above
12. Paint Accent 1: water-based, as above
13. Paint Accent 2: water-based, as above
14. Paint Accent 3: water-based, as above
15. Wallcovering: manufactured from 100% organic fibres and substrates using water-based dyes, installed with water-based, low VOC adhesive
16. Panel Fabric Field: manufactured from 100% recycled materials
17. Panel Fabric Accent: manufactured from 100% recycled materials
18. High Pressure Plastic Laminate 1: horizontal general-purpose grade, textured finish
19. High Pressure Plastic Laminate 2: as above
20. High Pressure Plastic Laminate 3: as above
21. High Pressure Plastic Laminate 4: as above
22. High Pressure Plastic Laminate 5: as above

A7. Finishes

Examples

Example 3A



A7. Finishes

Examples

Example 3B



A7. Finishes

Examples

Finishes Legend

Example 4 (see illustrations on the next two pages)

1. Wood Stain: clear on beech
2. Linoleum Field: 2.5 mm gauge, marbled, installed with solvent-free adhesive
3. Linoleum Accent 1: as above
4. Linoleum Accent 2: as above
5. Linoleum Accent 3: as above
6. Accent Carpet Tile 1: tufted textured loop, 500 mm x 500 mm, bulk continuous filament nylon, solution dyed, permanently antistatic and soil-resistant, face fibre made from 11% recycled fibre, backing manufactured from 40% recycled materials, ECO logo, EPP certification, ISO 14001 certified, ISO 9001 certified, reclamation program
7. Accent Carpet Tile 2: tufted textured loop, 500 mm x 500 mm, bulk continuous filament nylon, solution dyed, permanently antistatic and soil resistant, face fibre made from 11% recycled fibre, backing manufactured from 40% recycled materials, ECO logo, EPP certification, ISO 14001 certified, ISO 9001 certified, reclamation program
8. Accent Carpet Tile 3: tufted textured loop, 500 mm x 500 mm, bulk continuous filament nylon, solution dyed, permanently antistatic, face fibre made from 11% recycled fibre, backing manufactured from 40% recycled materials, ECO logo, EPP certification, ISO 14001 certified, ISO 9001 certified, reclamation program
9. Field Carpet Tile: tip sheared loop, 500 mm x 500 mm, bulk continuous filament nylon, solution dyed, permanently antistatic and soil resistant, face fibre made from 11% recycled fibre, backing manufactured from 40% recycled materials, ECO logo, EPP certification, ISO 14001 certified, ISO 9001 certified, reclamation program
10. Paint Field 1: water-based, low odor, low VOC, washable, EcoLogo, certified by the Environmental Choice Program
11. Paint Field 2: water-based, as above
12. Paint Accent 1: water-based, as above
13. Paint Accent 2: water-based, as above
14. Paint Accent 3: water-based, as above
15. Wallcovering: manufactured from 100% organic fibres and substrates using water-based dyes, installed with water-based, low VOC adhesive
16. Panel Fabric Field: manufactured from 100% recycled materials
17. Panel Fabric Accent: manufactured from 100% recycled materials
18. High Pressure Plastic Laminate 1: horizontal general-purpose grade, textured finish

A7. Finishes

Examples

- 19. High Pressure Plastic Laminate 2: as above
- 20. High Pressure Plastic Laminate 3: as above
- 21. High Pressure Plastic Laminate 4: as above
- 22. High Pressure Plastic Laminate 5: as above

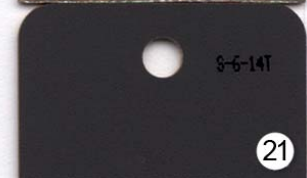
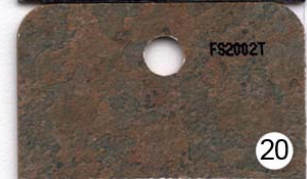
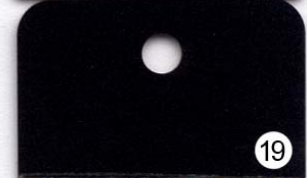
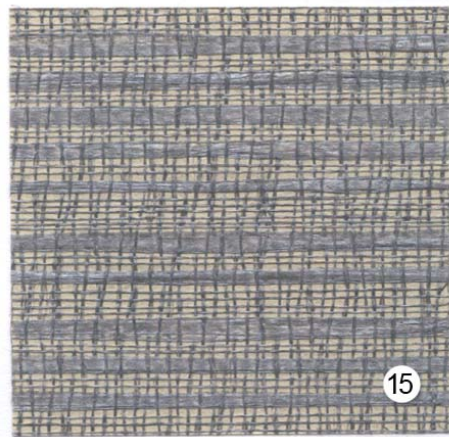
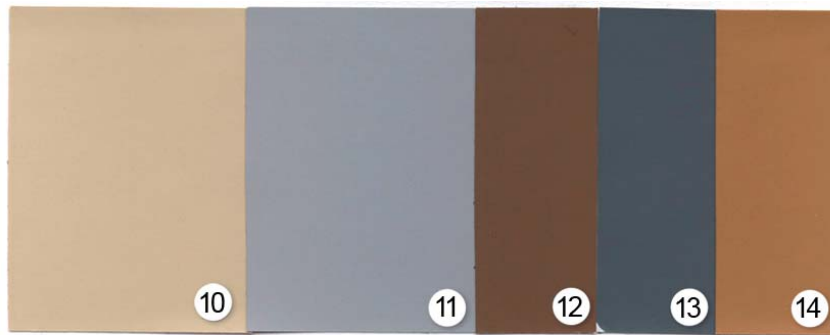
Example 4A



A7. Finishes

Examples

Example 4B



A7. Finishes

Examples



TAB A8. Costing



A8.1 Fit-up Cost Limits

Following are the Fit-up Cost Limits for general-purpose office accommodation, as determined through an independent costing exercise (Hanscomb, 2001), and revised for 2005/2006 to reflect increases to the Construction Price Index.

Fit-up cost limits are provided for two office space categories: general administrative and public contact. The rates are based on the cost of all standard fit-up components, and are to be used as a budgeting mechanism when preparing cost estimates for fit-up projects.

The rates are scaled according to two ranges of space size, and are provided for major urban centres across the country. Regions may adjust these costs for centres not identified in the tables, based on knowledge of local construction costs and market conditions.

General Administrative

	2005/06	
	<1500 m ²	>1500 m ²
City	(\$/m ² Usable)	
St. John's	\$360.59	\$349.63
Halifax	\$348.54	\$340.87
Montreal	\$339.57	\$330.83
Ottawa	\$342.10	\$335.54
Toronto	\$415.62	\$400.07
Winnipeg	\$343.07	\$325.19
Calgary	\$367.32	\$365.09
Edmonton	\$360.95	\$357.60
Vancouver	\$399.73	\$388.38
Victoria	\$388.38	\$372.48
Whitehorse	\$422.45	\$412.23
Yellowknife	\$440.62	\$431.53
Iqaluit	\$549.63	\$538.28

A8. Costing

Fit-up Cost Limits

Public Contact

	2005/06	
	<1,500 m ²	>1,500 m ²
City	(\$/m ² Usable)	
St. John's	\$361.52	\$348.65
Halifax	\$351.03	\$340.60
Montreal	\$341.32	\$332.49
Ottawa	\$344.85	\$334.33
Toronto	\$412.39	\$399.00
Winnipeg	\$342.20	\$330.32
Calgary	\$370.14	\$362.97
Edmonton	\$365.26	\$358.07
Vancouver	\$399.67	\$391.22
Victoria	\$391.55	\$374.57
Whitehorse	\$424.28	\$412.15
Yellowknife	\$443.67	\$431.55
Iqaluit	\$535.80	\$521.25

Resource Management and Systems
August 2005

A8. Costing

Fit-Up Cost Limits

A8.2 Source of Funds for Non-compliant Fit-up Components

The PWGSC Real Property business line budget is funded to fit-up office space to meet general administrative and public contact operational requirements. The Real Property Program is not resourced to cover the cost of special fit-up requirements for quasi-judicial offices, secure administrative offices and special purpose space. Therefore, a source of funds must be identified to cover the difference between the cost of providing general-purpose office space and the customer's special requirements. This responsibility lies with customer departments and agencies; however, PWGSC as a real property expert and a common service provider, can support them in their discussions with Treasury Board Secretariat.

Customer departments and agencies must document their specific requirements for accommodation and additional funding in a business case so that they can be appropriately considered for funding either within their own operational budget or through a submission to Treasury Board. PWGSC can assist with:

- the confirmation of department/agency fit-up requirements;
- the identification of fit-up elements and level of service (soft costs) above standards;
- the provision of cost estimates; and
- the recognition that additional funding is required (above PWGSC's funded standards) and that securing these funds is a customer department/agency accountability.

Should additional funding be required, there are two potential sources of funds:

- the customer department/agency's current operating budget; or
- Treasury Board (new money).

A8. Costing

Source of Funds for
Non-compliant Fit-up
Components

Once the source of funds is determined, several payment options can be explored. For example:

For space replacement projects

- if the source of funds is Treasury Board, the new funding can be directed to the customer's budget or to PWGSC; or
- if the source of funds is the customer, the customer can pay by means of a Specific Service Agreement (SSA) or request an operating budget transfer to PWGSC via ARLU or Supplementary Estimates.

For expansion projects

- if the source of funds is the new approved program, the accommodation levy (13%) could be increased to a percentage that would recognize the additional costs or through a fully costed Treasury Board submission.

A8. Costing

Source of Funds for
Non-compliant Fit-up
Components

A8.3 Cost Estimates

Project Managers and Project Officers are requested to follow the format shown in the example below when preparing their cost estimates for fit-up projects. This breakdown will help to determine those types of fit up elements that are more often associated with increased costs.

This costing example is based on Plan Example PL4 in A5.2: Sample Plans. A blank version of this form is available in A9.1: Fit-up Cost Estimate Template.

Generic Fit-up (National Capital Area)

Summary (usable floor area: 2878 m²)

Fit-up Component	Total Cost Estimate	\$/m ²
Partitions	73,302	25.47
Doors and Frames (including hardware)	33,705	11.71
Finishes	44,499	15.46
Millwork and Specialties	39,600	13.76
Plumbing	12,000	4.16
HVAC	80,000	27.81
Fire Protection	32,000	11.12
Electrical	69,000	23.97
General Requirements*	80,151	27.85
Plants and Planters (21 – not shown)	3,150	1.09
Panels/screens (including service conduits, power receptacles and voice/data outlets)	457,000	158.79
Fit-up Total	924,407	321.19

Variables that could impact on fit-up costs include, but are not limited to:

- project size;
- open workstation/closed office and support space ratio;
- ceiling heights;
- specific detailing of partition assemblies;
- specific design features;

A8. Costing

Cost Estimates

* Includes insurance, bonding, site office and supplies, site safety and security and materials handling.

- the inclusion of “atypical” support spaces (e.g. first-aid room, primary reception area, etc.);
- existing conditions (e.g. need to relocate a fire extinguisher or fire hose cabinet, a non-uniform layout of sprinklers or air supply/returns, etc.); and
- region/municipality (e.g. the cost of developing office space is generally higher in Toronto than in Winnipeg).

A8. Costing

Cost Estimates

A8.4 Additional Direct and Indirect Costs

When project parameters are in compliance with the PWGSC accommodation policies and fit-up standards, there are a number of additional direct and indirect costs considered to be part of the project delivery and funded by PWGSC. As indicated in the table below, some of the standard items/activities are included in the fit-up cost limits while others must be programmed separately through Building Management Plans (BMPs) or otherwise identified at the time of the project. Costs for items/activities under the responsibility of customer departments/agencies are also identified below:

Other Items/Activities Inherent to Fit-up Projects		Funding Accountabilities		
		Fit-up Cost Limit	Other Project Costs	Customer Cost
A	Other Direct Costs			
	<ul style="list-style-type: none"> Building and occupancy permits, as required. 		Yes	
	<ul style="list-style-type: none"> Contractor's overhead and profit. 	Yes		
	<ul style="list-style-type: none"> Commissioning – component systems and integrated systems performance testing, training, commissioning documentation including building management manual, as built, balancing, etc. 	Yes	Yes	Yes
	<ul style="list-style-type: none"> Development of the functional program (see R1. Glossary). 			Yes
	<ul style="list-style-type: none"> Dismantling, moving and reassembling computer, telecommunications and other specialized equipment or furnishings (e.g. fine art). 			Yes
	<ul style="list-style-type: none"> Moving supplies and services. 		Yes	
	<ul style="list-style-type: none"> Return to initial state at end of lease or demolition in Crown-owned facilities – all standard fit-up components. 		Yes	
	<ul style="list-style-type: none"> Return to initial state at end of occupancy – all nonstandard items initially paid for by the customer (e.g. washroom for specific tenant use). 			Yes
	<ul style="list-style-type: none"> Security guards for after hours work in occupied space. 			Yes
	<ul style="list-style-type: none"> Security guard services or other expenses related to customer's security needs. 			Yes
	<ul style="list-style-type: none"> Space measurement. 		Yes	

A8. Costing

Additional Direct and Indirect Costs

Other Items/Activities Inherent to Fit-up Projects		Funding Accountabilities		
		Fit-up Cost Limit	Other Project Costs	Customer Cost
	<ul style="list-style-type: none"> Trade costs specifically related to the construction contract. 	Yes		
B	Consultant Fees (Direct “Soft” Costs)			
	<ul style="list-style-type: none"> Professional consulting fees for architectural, interior design, code review (if HRSDC cannot provide service), mechanical, electrical and structural engineering services. 		Yes	
	<ul style="list-style-type: none"> Fees and other costs related to additional design reviews and specialized requirements (see chapter A8.5). 			Yes
C	Other Fees (Direct “Soft” Costs)			
	<ul style="list-style-type: none"> Lessor management fee for soft costs. 		Yes	
	<ul style="list-style-type: none"> Lessor management fee for construction. 		Yes	
	<ul style="list-style-type: none"> Lessor’s fee related to portion funded by the customer. 			Yes
D	PWGSC Fees (Indirect Costs)			
	<ul style="list-style-type: none"> PWGSC accommodation planning and design fee. 		Yes	
	<ul style="list-style-type: none"> PWGSC project management fee. 		Yes	
	<ul style="list-style-type: none"> PWGSC project leadership fee. 		Yes	
	<ul style="list-style-type: none"> PWGSC construction supervisory fee. 		Yes	
	<ul style="list-style-type: none"> PWGSC’s fee for other services, as required. 		Yes	
	<ul style="list-style-type: none"> PWGSC’s fee related to portion funded by the customer. 			Yes
E	Operation and Maintenance Cost			
	<ul style="list-style-type: none"> Standard base building, cleaning and maintenance services as described in the Occupancy Instrument. 		Yes	
	<ul style="list-style-type: none"> Maintenance and other fees associated with customer funded fit-up components. 			Yes
	<ul style="list-style-type: none"> Additional base building and cleaning services. 			Yes

A8. Costing

Additional Direct and Indirect Costs

A8.5 Project Delivery Cost Controls

It is not only the fit-up project, but also the process for delivering a fit-up project, that must be controlled to help constrain costs. Extensive changes or numerous revisions during the planning and design stages risk causing delays in the project schedule as well as overruns in the budget.

In order to ensure more timely and cost effective delivery of fit-up projects, the following controls and funding accountabilities will apply:

- The "2 revision rule" – The Fit-up Standards allow a maximum of two customer requested revisions per deliverable during the schematic and design development stages prior to final approval. Anything over this limit is non-standard and billable to the customer. (Note: If the two revisions are not used at one stage, there is no provision to carry the allowance over to a subsequent stage.)
- Costs related to delays in reviewing and approving project documents (drawings, specifications) are billable to the customer;
- Costs related to design changes requested following the design development stage (including design, management fees and the cost of delays during the construction drawing stages and all costs resulting from changes requested during the construction or post occupancy stages) are billable to the customer.
- Costs related to implementing customer requested revisions to previously approved (signed off) documents are billable to the customer.
- Additional design and management services generated by specialized or enhanced customer requirements, including accelerated project delivery, are billable to the customer.

A "customer requested revision" is deemed to be a requirement or preference not previously identified, that necessitates a substantial re-examination of completed work (such as reworking of previous drawings and/or project documents), in order to find a solution that would accommodate the new requirement.

Minor adjustments to drawings that do not have substantial impact on other areas, such as relocating a door or reorienting a workstation, are not considered a "revision" relative to the "2 revision rule". Similarly, work that is deemed by the project manager to be contractually incomplete or non-compliant with the standards is not considered a customer responsibility.

A8. Costing

Project Delivery Cost Controls



TAB A9. Forms and Templates



A9.1 Fit-up Cost Estimate Template

Project Managers and Project Officers are requested to follow the format shown below when preparing their cost estimates for fit-up projects. This breakdown will help to determine those types of fit-up elements that are more often associated with increased costs.

Project No.: _____

Name: _____

Usable Floor Area: _____

Summary:

Fit-up Component	Total Cost Estimate	\$/m ²
Partitions		
Doors and Frames (including hardware)		
Finishes		
Millwork and Specialties		
Plumbing		
HVAC		
Fire Protection		
Electrical		
General Requirements*		
Plants and Planters (21 – not shown)		
Panels/screens (including service conduits, power receptacles and voice/data outlets)		
Fit-up Total		

Variables that could impact on fit-up costs include but are not limited to:

- project size;
- open workstation/closed office and support space ratio;
- ceiling heights;
- specific detailing of partition assemblies;

A9. Forms and
Templates

* Includes insurance, bonding, site office and supplies, site safety and security and materials handling.

Fit-Up Cost Estimate
Template

- specific design features;
- the inclusion of “atypical” support spaces (e.g. first-aid room, primary reception area, etc.);
- existing conditions (e.g. need to relocate a fire extinguisher or fire hose cabinet, a non-uniform layout of sprinklers or air supply/returns, etc.); and
- region/municipality (e.g. the cost of developing office space is generally higher in Toronto than in Winnipeg).

A9. Forms and Templates

Fit-Up Cost Estimate
Template

A9.2 PWGSC Occupancy Phase Cost Estimate

The PWGSC Occupancy Phase Cost Estimate form was developed by the NCA Portfolio Management Directorate, Accommodation and Portfolio Management Sector, and was endorsed by the Real Property Investment Board at its meeting of 2 June 2004. The form is intended as a guideline for use in determining the cost objectives around the occupancy phase of any given space project, and should be included as an appendix to the IAR. The estimates generated by completing the form would feed into the overall project or contract cost objectives, e.g. LPA, PPA, EPA, and estimate of total consideration.

The PWGSC Occupancy Phase Cost Estimate was used to develop the format for the Fit-up Cost Estimate Template provided in A9.1.

For further information on this form, please contact a representative of either the National or the NCA Portfolio Management Directorate, Accommodation and Portfolio Management Sector, Real Property Branch.

A9. Forms and Templates

PWGSC Occupancy
Phase Cost Estimate

PWGSC Occupancy Phase Cost Estimate

Appendix X: Occupancy Phase Cost Estimate (one-time costs)

Note: The form has been populated with sample information.

Building name and/or address Tenant(s)	Preliminary or Lease Project Approval Indicative Estimate (Current Dollars)			Effective or Revised Lease Project Approval Substantive Estimate (Current Dollars)							
	2,500.0			2,878.0							
m2u:	Crown Cost	- PWGSC FA&HSL	= Tenant recovery	Remarks	Crown Cost	\$/m2u	- PWGSC FA&HSL Cost	\$/m2u	\$/m2u fund.	= Tenant recovery	Remarks
Floor finishing	\$0	\$0	\$0	Included in lease agreement	\$0	\$0.00	\$0	\$0.00	\$0.00	\$0	
Ceiling system	\$0	\$0	\$0	Not applicable	\$0	\$0.00	\$0	\$0.00	\$0.00	\$0	
Window coverings	\$0	\$0	\$0	Included in lease agreement	\$0	\$0.00	\$0	\$0.00	\$0.00	\$0	
Backbone cabling & pathways	\$22,575	\$22,575	\$0	Assuming \$9.03/m2u	\$32,000	\$11.12	\$26,000	\$9.03	\$9.03	\$6,000	
Other (provide description)	\$0	\$0	\$0		\$0	\$0.00	\$0	\$0.00	\$0.00	\$0	
Base building sub-total	\$22,575	\$22,575	\$0		\$32,000		\$26,000			\$6,000	
Base building contingency	\$5,644	\$5,644	\$0	25% of base building sub-total	\$3,200		\$2,600			\$600	
Base building total	\$28,219	\$28,219	\$0		\$35,200		\$28,600			\$6,600	
Partitioning	\$0	\$0	\$0	Unknown at this stage of project delivery	\$80,000	\$27.80	\$72,764	\$25.28	\$25.28	\$7,236	
Doors & frames (incl hardware)	\$0	\$0	\$0	Unknown at this stage of project delivery	\$60,000	\$20.85	\$33,454	\$11.62	\$11.62	\$26,546	
Interior finishes	\$0	\$0	\$0	Unknown at this stage of project delivery	\$50,000	\$17.37	\$44,166	\$15.35	\$15.35	\$5,834	
Millwork & specialties	\$0	\$0	\$0	Unknown at this stage of project delivery	\$30,000	\$10.42	\$30,000	\$10.42	\$13.66	\$0	
Plumbing systems	\$0	\$0	\$0	Unknown at this stage of project delivery	\$2,000	\$0.69	\$2,000	\$0.69	\$2.07	\$0	
HVAC systems	\$0	\$0	\$0	Unknown at this stage of project delivery	\$47,000	\$16.33	\$39,711	\$13.80	\$13.80	\$7,289	
Fire protection systems	\$0	\$0	\$0	Unknown at this stage of project delivery	\$25,000	\$8.69	\$15,884	\$5.52	\$5.52	\$9,116	
Electrical systems	\$0	\$0	\$0	Unknown at this stage of project delivery	\$21,000	\$7.30	\$21,000	\$7.30	\$21.73	\$0	
General requirements	\$0	\$0	\$0	Unknown at this stage of project delivery	\$95,000	\$33.01	\$79,562	\$27.65	\$27.65	\$15,438	
Plants and planters	\$0	\$0	\$0	Unknown at this stage of project delivery	\$0	\$0.00	\$0	\$0.00	\$1.08	\$0	
Panels/screens	\$0	\$0	\$0	Unknown at this stage of project delivery	\$500,000	\$173.73	\$521,148	\$181.08	\$181.08	(\$21,148)	
Fit-up sub-total	\$797,075	\$797,075	\$0	Assuming PWGSC funding of \$318.83/m2u	\$910,000	\$316.19	\$859,689	\$298.71	\$318.83	\$50,311	
Fit-up contingency	\$199,269	\$199,269	\$0	25% of fit-up sub-total	\$91,000		\$85,969			\$5,031	
Fit-up total	\$996,344	\$996,344	\$0		\$1,001,000		\$945,658			\$55,342	
Telecommunications & informatics distribution	\$0	\$0	\$0	Tenant funded, managed & contracted	\$0	\$0.00	\$0	\$0.00		\$0	Tenant funded, managed & contracted
Enhanced security	\$0	\$0	\$0	Tenant funded, managed & contracted	\$0	\$0.00	\$0	\$0.00		\$0	Tenant funded, managed & contracted
Storage system(s)	\$0	\$0	\$0	Tenant funded, managed & contracted	\$0	\$0.00	\$0	\$0.00		\$0	Tenant funded, managed & contracted
Furnishings	\$0	\$0	\$0	Tenant funded, managed & contracted	\$0	\$0.00	\$0	\$0.00		\$0	Tenant funded, managed & contracted
Business equipment	\$0	\$0	\$0	Tenant funded, managed & contracted	\$0	\$0.00	\$0	\$0.00		\$0	Tenant funded, managed & contracted
Artwork	\$0	\$0	\$0	Tenant funded, managed & contracted	\$0	\$0.00	\$0	\$0.00		\$0	Tenant funded, managed & contracted
Primary signage	\$0	\$0	\$0	No requirement	\$0	\$0.00	\$0	\$0.00		\$0	No requirement
Secondary signage	\$0	\$0	\$0	Tenant funded, managed & contracted	\$0	\$0.00	\$0	\$0.00		\$0	Tenant funded, managed & contracted
Moving & storage	\$42,000	\$42,000	\$0	Moving 140 FTEs @ \$300/FTE	\$56,875	\$19.76	\$56,875	\$19.76		\$0	Moving 175 people @ \$325/person
Other (provide description)	\$0	\$0	\$0		\$0	\$0.00	\$0	\$0.00		\$0	
Other occupancy total	\$42,000	\$42,000	\$0		\$56,875		\$56,875			\$0	
Functional programming	\$0	\$0	\$0	Tenant funded, managed & contracted	\$0	\$0.00	\$0	\$0.00		\$0	Tenant funded, managed & contracted
Architectural design	\$0	\$0	\$0	Unknown at this stage of project delivery	\$61,000	\$21.20	\$57,354	\$19.93		\$3,646	Pro-rated share of base building and fit-up
Mechanical & electrical design	\$0	\$0	\$0	Unknown at this stage of project delivery	\$52,000	\$18.07	\$48,892	\$16.99		\$3,108	Pro-rated share of base building and fit-up
Other (provide description)	\$0	\$0	\$0		\$0	\$0.00	\$0	\$0.00		\$0	
Consultant sub-total	\$81,965	\$81,965	\$0	10% of base bldg & fit-up sub-totals	\$113,000	\$39.26	\$106,245	\$36.92		\$6,755	
Consultant contingency	\$20,491	\$20,491	\$0	10% of base bldg & fit-up contingencies	\$5,650		\$5,312			\$338	5% of consultant sub-total
Consultant fees total	\$102,456	\$102,456	\$0		\$118,650		\$111,557			\$7,093	
PWGSC accommodation planning & interior design	\$15,233	\$0	\$15,233	1.8 x 125 hrs @ hourly billable rate	\$18,279	\$6.35	\$17,238	\$5.99		\$1,041	1.8 x 150 hrs @ hourly billable rate
PWGSC technical quality control	\$13,266	\$0	\$13,266	1.8 x 100 hrs @ hourly billable rate	\$14,593	\$5.07	\$13,761	\$4.78		\$831	1.8 x 110 hrs @ hourly billable rate
PWGSC project management	\$39,798	\$0	\$39,798	1.8 x 300 hrs @ hourly billable rate	\$49,748	\$17.29	\$46,913	\$16.30		\$2,834	1.8 x 375 hrs @ hourly billable rate
PWGSC project leadership	\$6,206	\$0	\$6,206	1.8 x 60 hrs @ hourly billable rate	\$7,757	\$2.70	\$7,315	\$2.54		\$442	1.8 x 75 hrs @ hourly billable rate
PWGSC other (provide description)	\$0	\$0	\$0		\$0	\$0.00	\$0	\$0.00		\$0	
PWGSC sub-total	\$74,502	\$0	\$74,502		\$90,376	\$31.40	\$85,227	\$29.61		\$5,149	Pro-rated share of base building and fit-up
PWGSC contingency	\$18,626	\$0	\$18,626	25% of PWGSC sub-total	\$9,038		\$8,523			\$515	Pro-rated share of base building and fit-up
PWGSC fees total	\$93,128	\$0	\$93,128		\$99,414		\$93,750			\$5,664	
Professional fees total	\$195,584	\$102,456	\$93,128		\$218,064		\$205,307			\$12,757	
Lessor management fee for soft costs	\$5,814	\$0	\$5,814	5% of design consultant costs & bldg permit	\$6,294	\$2.19	\$5,918	\$2.06		\$376	5% of design consultant costs and bldg permit
Lessor management fee for construction	\$102,456	\$0	\$102,456	10% of construction costs	\$103,620	\$36.00	\$97,426	\$33.85		\$6,194	10% of construction costs
Building permit	\$13,832	\$0	\$13,832	\$13.50 per \$1,000 of construction	\$7,239	\$2.52	\$6,806	\$2.36		\$433	\$13.50 per \$1,000 of construction
Other (e.g. phone, fax, courier, travel, reproduction)	\$9,779	\$0	\$9,779	5% of professional fees total	\$10,903	\$3.79	\$10,251	\$3.56		\$652	5% of Professional Fees
Disbursements total	\$131,881	\$0	\$131,881		\$128,056		\$120,401			\$7,655	
Total project cost (without GST/HST)	\$1,394,028	\$1,169,019	\$225,009		\$1,439,195		\$1,356,842			\$82,354	
Risk allowance (without GST/HST)	\$100,000	\$0	\$100,000	See Appendix Y	\$100,000		\$94,278			\$5,722	See Appendix Z
GST/HST	\$98,063	\$81,831	\$16,232	7% of (total project - PWGSC fees + risk)	\$100,785		\$95,016			\$5,769	7% of (total project - PWGSC fees + risk)
Total project cost (with GST/HST)	\$1,592,091	\$1,250,850	\$341,241		\$1,639,980		\$1,546,135			\$93,845	

Soft costs (professional fees + disbursements)	\$327,465
Hard costs (base bldg + fit-up + other)	\$1,066,563
Soft / hard cost ratio	30.70%

\$346,120
\$1,093,075
31.66%

Spending authority (before GST)	\$172,061
GST	\$5,525
Spending authority (including GST)	\$177,586

A9. Forms and Templates

PWGSC Occupancy Phase Cost Estimate

A9.3 Fit-up Compliance Monitoring Form

Fit-up Compliance Monitoring Form

Building		Region/SIT		Date	
Project Title					
Customer Department/Agency					
Project Team					
Project Leader (PL)					
Project Manager/Officer					
Accommodation Mgr/Officer (AM/AO)					
Project Cost Estimate (note 1)	PWGS	Customer	Total	Other Information	
Fit-up Costs			0	Class Estimate	
Base Building Costs			0	Approval Status	
Other Costs			0	Project Status	
Consultant Fees			0	Office Type (note 2)	
PWGS Fees			0	Project Size (m2u)	
Professional Fees			0	Planned Completion Date	
Contingency			0	Project Number (PBMS)	
Total	0	0	0	Building Cost Centre	
Project Description					

If yes, complete page 2 of the form

Non-compliant items requested by the customer department/agency (yes/no)

Building	0	Region/SIT	0	Date	*****
Project Title	0			Request No.	0
Customer Department/Agency	0			Amendment No.	0

List of non-compliant items and approvals

Components/Delivery Services (note 3)	TB Approved Program Requirement (yes/no)	Approved by Customer Dept (note 4) (yes/no)	Recommended by Project Team (yes/no)	Approved by ADM RPB PWGSC (yes/no)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Total Cost Estimate				

PL/AM/AO	Name/Title	Phone/Fax Number
Customer (note 5)	Name/Title	Signature/Date
PWGSC (note 6)	ADM Real Property Branch Name/Title	Signature/Date

Notes:

1. Refer to PWGSC Occupancy Phase Cost Estimate (see Fit-up Standards, chapter A9.2)
2. General Administrative, Public Contact, Quasi-judicial or Secure Administrative
3. Business case must be attached (see Fit-up Standards, chapter A2.4)
4. Delegated authority
5. Customer is fully accountable for non-compliance decisions and costs, including additional ongoing operational and maintenance costs related to the decision.
6. Once approved return to the PL, AM or AO by fax



SECTION B: Ministerial and Deputy Ministerial Accommodation



TAB B1. Introduction

Work is currently underway to develop fit-up standards and interpretive material for Ministerial and Deputy Ministerial accommodation, including standards for ministerial exempt staff .

When the material has been prepared, it will be included in this manual and posted to the Fit-up Standards Web site at

http://www.pwgsc.gc.ca/realproperty/text/pubs_fitup/toc-e.html.



SECTION C: Secure Administrative and Quasi-judicial Accommodation



TAB C1. Introduction

Secure Administrative Offices

Standards have not yet been developed for secure administrative office accommodation.

Until such time as standards exist, the general spirit and intent of the Fit-up Standards for general-purpose office space shall apply to secure administrative offices. This means that all fit-up components that form part of the “bundle of goods” must comply with the Fit-up Standards and that the office and support space allocations must be respected. This takes into consideration the allowances for additional customer-funded security requirements that have been incorporated into the standards. Anything that does not comply must be approved in accordance with the process outlined in TAB A2.

The Fit-up Cost Limits are to be used as a budgeting mechanism when preparing cost estimates and as an investment threshold, above which customer departments must fund.

Quasi-judicial Offices

Work is currently underway to develop fit-up standards and interpretive material for quasi-judicial office accommodation.

Until such time as standards exist, the general spirit and intent of the Fit-up Standards for general-purpose office space shall apply to quasi-judicial offices. This means that all fit-up components that form part of the “bundle of goods” must comply with the Fit-up Standards and that the space allocation limits for quasi-judicial offices as defined in the *Framework for Office Accommodation and Accommodation Services* must be respected.

The Fit-up Cost Limits are to be used as a budgeting mechanism when preparing cost estimates and as an investment threshold, above which customer departments must fund.



Resources





TAB R1. Glossary



TAB R1. Glossary

Base Building

The building shell including finished floors, exterior walls, interior core and demising walls, finished ceilings complete with lighting, and other building systems consistent with the designed function and planned general use of the building. In the case of office accommodation, for example, the base building would include exterior window coverings and primary identification signage.

Class A Cost Estimate

A cost estimate based on the review of the bid documents against the Class B level estimate. The Class A estimates are prepared and reviewed prior to tendering.

Class B Cost Estimate

An expansion of a Class C cost estimate, incorporating more detailed design requirements and confirming the full scope of the work.

Class C Cost Estimate

A cost estimate based on early partition layouts, program content, quality levels and exclusions.

Class D Cost Estimate

A cost estimate usually prepared by the design consultant from an accepted concept presentation/design solution based on user requirements.

Effective Project Approval (EPA)

Sought at the Design Development Phase and normally permits the project team to proceed through the remaining stages without interruption. Unless circumstances change markedly before the start of construction, a project with an Effective Project Approval will get built.

Fire-resistance Rating

The time in hours or fraction thereof that a material or assembly of materials will withstand the passage of flame and the transmission of heat when exposed to fire under specified conditions of test and performance criteria, or as determined by extension or interpretation of information derived there from as prescribed in the building codes.

R1. Glossary

Fire Separation

A construction assembly that acts as a barrier against the spread of fire.
A fire separation may or may not have a fire-resistance rating.

Fit-up Cost Limits

PWGSC has established fit-up cost limits for different office types in selected regional sites across the country. Unit costs, which are adjusted from time to time, are based on fit-up elements generally considered to be part of a typical PWGSC fit-up. (See Chapter A8.1 “Fit-up Cost Limits”)

Fit-up for Initial Occupancy

The preparation of accommodation for initial federal occupancy in accordance with PWGSC’s Fit-up Standards. This fit-up may include alterations or improvements to the base building and/or base building systems, including demolition. A list of fit-up items that PWGSC provides for initial occupancy is included in Chapter A3.2 “Fit -Up Components and Funding Accountabilities”.

Fit-up of Existing Space For Reuse (Refit)

Work required to alter space previously occupied by one federal organization, to meet the requirements of a *different* federal organization. The scope of the fit-up for reuse is determined by taking into consideration the life cycle approach, the functional requirements of the new customer, existing conditions of the previously occupied space, and the duration of the new occupancy. The fit-up of existing space does not apply to leased inventory, and is not always directly connected to the term of an Occupancy Instrument.

Floor Plate

The size and shape of the floor of a particular building.

Functional Program

The purpose of a functional program is to ensure the compilation of sufficient information to analyze the customer department’s current and future functional requirements, examine the planning alternatives and identify any deviations from the PWGSC Fit-up Standards. Functional programming reports are funded by the customer and include:

- current and future requirements;
- furniture inventory and assessment;

- master drawings;
- workstation/work settings recommendations;
- support space and special purpose space (SPS) recommendations;
- test plans (to test the viability of the work settings, support spaces and SPS recommendations);
- procurement strategy for furniture (if required);
- communications/data recommendations;
- security recommendations;
- proximity recommendations;
- preliminary building capability recommendations;
- functional space equation; and
- indicative cost estimate.

General Administrative Offices

Offices that accommodate general office functions and activities that do not require special security or other special features. General administrative offices do not have high interface with the public. These offices comprise the majority of PWGSC office space occupied by customer departments and agencies.

General Support Space

Also known as support area, these spaces are common to all general-purpose office environments and include meeting rooms, quiet rooms, kitchenettes, shared equipment areas, printer stations, reception/waiting areas, and other areas as described in Chapter A3.3.

Heating, Ventilation and Air Conditioning (HVAC) Systems

Mechanical systems that supply or remove heat, supply or remove humidity, and supply outdoor air as required.

Kiosk

Small structure for display or dissemination of information.

Non-compliant Fit-up Component

A customer-requested fit-up item or service that exceeds PWGSC's Fit-up Standards. The customer department is accountable and responsible to provide both approval and funding for non-compliant components. Any and all non-compliant items require the approval of the ADM (RPB), PWGSC, based on a formal request from the customer department,

R1. Glossary

authorized by its senior management, and accompanied by funding for the item(s). Customer funding shall cover all costs related to the non-compliant item including on-going maintenance if maintenance requirements are expected to exceed PWGSC's standards.

Occupancy Instrument (OI)

A formal agreement between a department or agency and PWGSC recording the specific details of an individual occupancy, and the terms and conditions that govern the provision and occupancy of the accommodation. An Occupancy Instrument typically records the quantity of space occupied in rentable and usable measurement, the address, the number of parking spaces provided, and the planned general use of the accommodation.

Office Space

Includes office/workstation areas, general support space and circulation for all four generic office types.

Parabolic Louvers

Light "fixtures" (luminaires) can be fitted with lenses or louvers. Parabolic louvers have a specially designed curved blade instead of a straight blade which blocks direct view of lamps, and directs the light downward.

Preliminary Project Approval (PPA)

An approval authority residing with the Real Property Program or, if beyond Departmental Authority, the Treasury Board. PPA is an approval in principle type of authority (usually a Class D cost estimate). With the approval in principle, a spending authority is usually obtained at a level sufficient to develop more precise cost estimates (Class B) to allow the appropriate delegated authority to make an informed decision regarding the granting of Effective Project Approval.

Project Requirements

Include project objectives, parameters and budget, lines of communication, governance for approvals, submission requirements and timelines.

Public Contact Offices

Offices accommodating functions that provide face-to-face services to the public. Functions and operations may include, but are not limited to:

- inquiries from walk-in customers;

- training/testing/meetings; and
- application/form processing.

Quasi-judicial Offices

Offices that accommodate adjudicative or legislative functions. They often require confidentiality or enhanced security and are used by organizations that interpret and administer legislation and regulations, conduct inquiries and hearings and/or perform adjudication functions on complaints, appeals and claims. Functions and operations may include, but are not limited to:

- management: adjudicative body operates separately from the administrative unit which provides service to the adjudicative body;
- meetings: conducted on a scheduled basis with internal staff and members of the public; and
- secure and confidential courtroom/hearing room space; physical protection of staff could be required.

Rentable Area

The space used to calculate rental payments. Rentable areas include usable areas and areas such as lobbies, washrooms and electrical rooms. Stairways, entrances and elevators or duct shafts are not included in rental areas.

Secure Administrative Offices

Offices accommodating activities which require enhanced levels of security. Functions and operations may include, but are not limited to:

- the review and storage of sensitive files; and
- little or no public contact.

Space Optimization

Space adjustments in accommodation undertaken with the objective of reducing the inefficient utilization of space in a manner that permits space recapture, improves the work environment and reduces the demand for lease dollars.

Special Purpose Space (SPS)

All other spaces required by the customer department or agency to accommodate specific activities that are essential to departmental programs are considered to be special purpose space. These spaces are typically nonrecurring and often not suitable for conversion to office accommodation because of their special requirements.

They are NOT included in the support space calculation.

Examples of special purpose spaces include but are not limited to:

- laboratories, health units or clinics;
- meeting or training complexes which serve outside groups;
- processing space;
- departmental libraries;
- gymnasiums, warehouses;
- file or storage areas other than as allowed by the Fit-up Standards;
- trade shops;
- mail rooms;
- computer training rooms;
- cash offices or similar spaces requiring special service and security features; and
- hearing rooms.

Specifications

Documents prepared to ensure correct supply and installation of all materials used for the construction project.

Specific Service Agreement (SSA)

An internal PWGSC contract between one of the service branches and another government unit. It describes the work to be done, the schedule and the cost of the work.

Stacking Diagram

A diagram showing how tenant organizations or parts of a tenant organization are located by floor of a multi-storey building. Also known as vertical zoning diagram.

Task Lighting

Lighting oriented to or located at a task position is generally called task lighting. Task lights located at the task area are usually used in conjunction with ambient or general lighting.

Tenant Services

Alterations to existing accommodation requested and funded by a customer and carried out during the term of an occupancy.

Usable Area

Office floor area available to the tenant. Columns and such are not included in usable area.

Workstation

Work space provided for an individual employee and his/her directly associated furniture and equipment.



TAB R2. Closed Office Assignments



TAB R2. Closed Office Assignments

The following table demonstrates closed office assignments in typical departmental organizational hierarchies.

Boxes identified by a darker outline indicate the lowest level that may be assigned a closed office, in accordance with Chapter A3.3.

DEPT A	DEPT B	DEPT C	DEPT D	DEPT E	DEPT F	DEPT G	DEPT H
Deputy Head	Deputy Head	Deputy Head	Deputy Head	Deputy Head	Deputy Head	Deputy Head	Deputy Head
-	-	-	EX-5 Executive Vice- president	EX-5 Deputy Commissioner	EX-5 Assistant Deputy Minister	-	-
-	EX-4 Deputy Chairman	EX-4 Assistant Deputy Minister	EX-4 Vice- president	-	EX-4 Executive Director	-	-
-	EX-3 Assistant Deputy Chairman	EX-3 Director General	-	EX-3 Assistant Commissioner	EX-3 Director General	EX-3 Director General	-
-	-	-	EX-2 Executive Director	EX-2 Chief Superintendent	EX-2 Director (w/15 reports)	-	EX-2 Director
-	EX-1 Coordinating Member	EX-1 Director	EX Equiv. Director (w/12 reports)	-	EX-1 (w/7 reports)	-	-
-		EX Equiv. (w/10 reports)		EX Equiv. Superintendent (w/13 reports)		EX Equiv. Director	EX Equiv. (w/15 reports)
AS-6 Most Senior Departmental Representative				Inspector		EX Minus 1 (w/10 reports)	

R2. Closed Office
Assignments